

Community Health Teams: A Healthcare Provider's System Transformation Opportunity

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ABSTRACT

"The goal of community health teams is to develop and implement care models that integrate clinical and community health promotion and preventive services for patients."

—Association of State and Territorial Health Officials (ASTHO)¹

Eleven community health teams (CHTs) operate in various geographies within Rhode Island. Physicians and payers refer their highest-risk patients to CHTs that serve as community extenders. Community health workers and others work to link referred individuals to primary care and work to address the other determinants affecting their health, such as safe housing. Since much of health is driven by factors outside of the healthcare setting, CHTs compliment the work of physicians within the office environment. Transforming practices and addressing both the physical and behavioral needs of patients simultaneously is key to CHT success. This article attempts to quantify the expanding need for CHTs within Rhode Island and describes ways in which CHTs as a practice transformation resource may be leveraged by providers.

BACKGROUND

ASTHO's aim for developing CHTs resonates in Rhode Island. Rhode Island's CHTs serve as extensions of primary care, reaching into the community setting to help patients (re)establish relationships with primary care while also addressing the social, behavioral, and environmental needs that affect health. Primary care may include those specialists who in some instances assume the role of primary care provider and care coordinator for their patients (e.g., geriatrician, oncologist, and obstetrician/gynecologist). In Rhode Island, there are currently 11 teams operating in various geographies. Rhode Island CHTs serve three critical functions:

- Improving population health by addressing social, behavioral, and environmental needs;
- Supporting providers in transitioning to value-based systems of care; and
- Transforming primary care in a way that increases quality of care, improves coordination of care, and reduces/controls related costs.

Rhode Island's CHTs are comprised of two major staff components: Community-Based, Licensed Health Professionals (CBLHPs) and Community Health Workers (CHWs). CBLHPs are typically licensed nurse care managers or behavioral health providers. Other CBLHPs include licensed health professionals who serve as clinical educators (e.g., nutritionists, pharmacists). All Rhode Island CHTs employ CHWs who are non-licensed staff trained as patient navigators, care coordinators, or resource specialists. Specialty CHWs are certified CHWs who also have successfully completed separate workforce development training (e.g., Diabetes Prevention Program, medical home model). Certified Peer Recovery Specialists who focus on behavioral health (including substance abuse recovery) given one's own lived experience may comprise a third component of a CHT, based on population and setting needs.

Several models for CHTs exist in Rhode Island, each operating in different locations and with slightly different foci. In general, Rhode Island CHTs fall into one of four models—an extension of a patient-centered medical home (PCMH) within a specified geography; an extension of general primary care practice; a statewide extension of a payer; or an extension of an accountable care organization. According to the Rhode Island State Innovation Model (SIM) Operation Plan, PCMH and primary care-based CHTs are estimated to have a catchment population of 75,000 and at least 14,000 Medicaid beneficiaries are within catchment areas of payer-based CHTs. Only one CHT organization provides services to children who have special healthcare needs in Rhode Island.

All CHTs within Rhode Island seek high-risk individuals for CHT referrals, services, and targeted interventions. To improve population health, address social and environmental determinants of health, and make progress in eliminating health disparities, CHTs are an essential health system transformation resource. As such, CHT services should be made available to all Rhode Islanders who need continued multi-disciplinary, community-based services to address the factors that impact one's health. This article attempts to quantify the current need for CHTs within Rhode Island and describes ways in which CHTs as a practice transformation resource may be leveraged by providers. As part of the SIM Test Grant, "highest-risk"² patients who are eligible for CHT services are not just those living in poverty but rather those who:

- Have three or more known chronic conditions;

- Have two or more special healthcare needs (i.e., disabilities);
- Have a significant behavioral health co-morbidity (including substance abuse);
- Are not regularly accessing primary care;
- Are unable to access essential healthcare due to cost; and
- Have three or more in-patient or emergency department visits within six months.

METHODS

Data to quantify the patient population considered to be “highest-risk,” and therefore a priority for CHTs, were compiled using the Behavioral Risk Factor Surveillance System (BRFSS) and HealthFacts RI. The BRFSS is a national telephone survey that monitors behavioral health risks, access to health care, and health conditions of randomly selected adults ages 18 and older. From January through December, the Rhode Island BRFSS conducted random-digit dialed telephone interviews with 6,531 (2013) and 6,450 (2014) Rhode Island, non-institutionalized adults.

HealthFacts RI, which first began collecting all-payer claims in 2014, aims to ensure transparency of information about the quality, cost, efficiency, and access of Rhode Island’s healthcare delivery system. Use of this data system provides insight into healthcare system use, the effectiveness of policy interventions, and the health of the population. HealthFacts RI collects, organizes, and analyzes healthcare data from nearly all major insurers who cover at least 3,000 Rhode Islanders. The system is based on claims paid and allows users to track the healthcare system’s utilization through measures of hospital readmissions, total cost of care, and participation in preventive/disease management services.

While data reflecting the exact “highest-risk” criteria is not readily available, proxy indicators were created using a combination of variables from existing survey questions and claims codes. Estimates that best represent the delineated “highest-risk” criteria were calculated. **Table 1** depicts the questions that were combined into indicators for each of the criteria and resulting estimates. Respondents were included in the indicator count if they answered “yes” to any BRFSS measure. Respondents who answered “no,” “not sure,” or “refused” were excluded from the indicator. Respondents missing one or more data elements for the disability indicator were excluded (5.3%). Respondents who reported that “they did not need a prescription” were excluded from the cost indicator. Confidence intervals (CI) were generated to reflect the stability of prevalence estimates. To account for the complex sampling design, BRFSS data were analyzed using SAS® 9.3. Claims from HealthFacts RI were included in the indicator count if they had three or more emergency department visits within 2013 or 2014. Note, these indicators do not represent unique respondents across indicators, only unique counts within the specified indicator.

RESULTS

The Rhode Island prevalence for each indicator is listed in Table 1. The estimated adult population size for each indicator was estimated using the respective year’s U.S. Census estimate for Rhode Island adults (ages 18 and older), while the estimate for children and adults used the overall estimate for all Rhode Islanders. The largest percentage of the population meeting any of the CHT eligibility criteria was for those adults with an identified behavioral health or substance abuse condition (35.6%). The smallest percentage of the population meeting any of the CHT eligibility criteria was for those children and adults who have had three or more emergency department visits in a calendar year (1.9%).

DISCUSSION

The estimated prevalence, by indicator, for those of “highest-risk” (i.e., eligible for CHT services), demonstrate that Rhode Island’s population would benefit from increased access to CHTs. While CHTs are currently attributed to at least an estimated 89,000 patients, it is unlikely that any one of the criteria are covered fully by these estimates. This is increasingly likely given that limited geographic-specific coverage extends only to Washington County, Blackstone Valley, and West Warwick. Access to quality care through CHTs that demonstrate the ability to adequately serve clients to address social and environmental determinants of health is critical. Further return-on-investment studies are planned to confirm the effectiveness of CHTs and models in Rhode Island.

There are a few study limitations. The indicators are not exact matches or exhaustive lists that fully represent the proposed criteria. Because questions such as hypertension are asked on odd-years only, use of a single survey was unavailable; therefore a percentage of respondents meeting at least one highest-risk criteria was not generated. Behavioral health morbidity was not analyzed across other conditions to indicate co-morbidity. For the HealthFacts RI data, all counts and percentages could only be estimated since Medicare data were from 2013, while Medicaid and commercial data were from 2014. Only insurers with more than 3,000 patients were included in HealthFacts RI.

MOVING FORWARD

The Rhode Island SIM Test Grant is committed to investing in ways to support providers in health system transformation and empower patients to embrace and navigate a changing delivery system focused on patient outcomes. As such, SIM encourages providers to engage in practice transformation efforts including, but not limited to: creating or participating in existing agreements that provide access to CHTs for their patients; employing certified CHWs to assist practices in assuring health equity for patients; and integrating physical and behavioral healthcare through Screening, Brief

Intervention, and Referral to Treatment (SBIRT) for patients. SIM is poised to prioritize a segment of Rhode Island for such services by investing funding to implement SBIRT in 10-12 sites and create at least two new CHTs to meet unmet social, behavioral, and environmental needs of Rhode Islanders. SIM's investment also includes data collection

and evaluation that explores the return-on-investment of these strategies to inform sustainability planning. Providers can engage in new opportunities by attending a SIM Steering Committee Meeting and checking the State of Rhode Island for Requests for Proposals.

Table 1. Indicators Estimating Rhode Island Needs for CHTs Using Highest-Risk Eligibility Criteria

Criteria	Indicator	Measure(s)	Data Source	Estimated Prevalence
Patients who have three or more known chronic conditions	Adults with three or more of the following conditions: hypertension, diabetes, coronary heart disease, cardiopulmonary disease, arthritis, and asthma	<ul style="list-style-type: none"> Has a doctor, nurse, or other health professional EVER told you that you had any of the following? For each, tell me "Yes," "No," or "Not sure" 	BRFSS (2013)	11.0% 95% CI: 10.1-11.9 (Est. 91,444 adults)
Patients who have two or more special healthcare needs (i.e., disabilities)	Adults with two or more disabilities as defined by five functional components/limitations	<ul style="list-style-type: none"> Are you blind or do you have serious difficulty seeing, even when wearing glasses? Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions? Do you have serious difficulty walking or climbing stairs? Do you have difficulty dressing or bathing? Because of a physical, mental, or emotional condition, do you have difficulty doing errands along such as visiting a doctor's office or shopping? 	BRFSS (2014)	9.2% 95% CI: 8.2-10.2 (Est. 76,480 adults)
Patients who have a significant behavioral health co-morbidity (including substance abuse)	Adults with one or more identified behavioral health or substance abuse condition only (i.e., not a co-morbidity): Smoking, chronic/binge drinking, or diagnosed depression.	<ul style="list-style-type: none"> Do you now smoke cigarettes every day, some days, or not at all? During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor? (Ever told) you have a depressive disorder, including depression, major depression, dysthymia, or minor depression? 	BRFSS (2014)	35.6% 95% CI: 33.8-37.4 (Est. 295,945)
Patients who are not regularly accessing primary care	Adults who have not visited a doctor for a routine check-up within 12 months	<ul style="list-style-type: none"> About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition 	BRFSS (2014)	19.8% 95% CI: 18.2 – 21.3 (Est. 164,599 adults)
Patients who are unable to access essential healthcare due to cost	Adults unable to access care, meaning see a provider or fill a prescription, due to high costs	<ul style="list-style-type: none"> Was there a time in the past 12 months when you needed to see a doctor but could not because of cost? Was there a time in the past 12 months when you did not take your medication as prescribed because of cost? Do not include over-the-counter (OTC) medication. 	BRFSS (2014)	17.1% 95% CI: 15.6-18.6 (Est. 142,153 adults)
Patients who have three or more in-patient or emergency department visits within six months	Children and adults who have had three or more emergency department visits in a calendar year	<ul style="list-style-type: none"> Number of Medicare-insured individuals with three or more claims for Emergency Room visits per calendar year Number of Medicaid-insured individuals with three or more claims for Emergency Room visits per calendar year Number of commercially-insured individuals with three or more claims for Emergency Room visits per calendar year 	HealthFacts RI (2013; 2014)	Est. 1.9% Est. 16,097 adults and children

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