

Rhode Island State Innovation Model (SIM) Test Grant

Better Health, Better Care, Lower Cost



Appendix A: Integrated Population Health Plan

Version 1

April 28, 2016

Population Health Preamble

Rhode Island aims to achieve measurable improvement in the health and productivity of all Rhode Islanders. To achieve this goal, the healthcare delivery, public health, community development, and social service sectors as well as the many academic, public, and private institutions in our state will work together to ensure that all Rhode Islanders are able to achieve their highest health potential, without system/structural barriers. This population health improvement effort requires multi-sector/multi-agency collaborations to help us transition from an uncoordinated, healthcare provider and payer-centric care focused environment to an environment where public health, social service, and healthcare delivery systems are well-integrated as well as outcomes-oriented and person-centric.

Our approach to population health improvement focuses on health across the life course (from birth to death) from the perspective of the “whole-person”, which includes the mind as well as the body. Thus, when we refer to “population health” we include behavioral health, where behavioral health includes mental health and substance use disorders. We agree that behavioral health is “*everyone’s business*,” a vision founded on a common understanding that behavioral health and wellbeing play a critical role in creating a well-functioning, healthy, and productive community.

Although the Integrated Population Health Plan focuses on specific physical and behavioral health conditions or diseases, we aim to create an approach that centers on wellness, not disease. As the plan evolves, our strategies will move toward methods that help Rhode Islanders live long, productive and healthy lives, addressing them not just as patients but as people.

Background and Description of SIM Project

The cost of health care, including behavioral healthcare is growing at an unsustainable rate in Rhode Island and across the United States. In 2009, the state of Rhode Island ranked 7th for healthcare costs in the US, with per-capita expenses of \$8,309 compared to the national average of \$6,815. In 2013, health care costs rose to \$8,628 per-capita. The cost of behavioral health treatment alone was \$853 million in 2013, 1.6% of the Rhode Island gross domestic product (GDP), which is higher than the national average for behavioral health care of 1.2% of GDP. In addition, it's estimated that the indirect costs associated with behavioral health disorders cost Rhode Island \$789 million in 2015, 9.5% of the state's budget.

Health care costs have been increasing at an average rate of approximately 6% each year in Rhode Island since the 1990s, compared to an average rate of approximately 5% per year nationally during the same period.^{1 2} Such growth is not sustainable in Rhode Island; and, if growth continues at this rate the cost of healthcare will begin to impact funding for other state functions. Additionally, national estimates suggest that the rising costs of health care are not only impacting federal and state budgets³, but are also impacting households/families: “out-of-pocket” expenses (e.g. copays and deductibles) have increased almost 50% in the past decade.⁴ Local evidence suggests that families are indeed struggling to afford medical care. According to the Rhode Island Department of Health (RIDOH) 2015 Statewide Health Inventory⁵, more than a third of respondents in a community survey reported that they don't feel confident they can get medical care they need without being set back financially, and over a quarter feel that they have to pay more for medical care than they can afford.

To address the rising cost of healthcare and the impact of increasing costs on families/households, the public health and healthcare delivery systems, and state budgets, the Centers for Medicare and Medicaid (CMS) implemented the State Innovation Models (SIM) initiative. The SIM initiative to provide federal grants to states to design and test new health care delivery and payment models to improve healthcare quality, reduce health care costs, and improve population health.

Rhode Island received a State Innovation Model (SIM) grant from the Centers for Medicare and Medicaid Studies (CMS) to redesign how the state's health care system delivers and pays for health care, including behavioral health care (hereafter referred to “whole person care”). The investment assumes that moving away from a fee for service payment model towards a system that rewards health care, including behavioral health, providers for quality and better outcomes will improve the overall health of the residents of Rhode Island and lower health care costs.

¹ Cuckler G, Martin A, Whittle L et al. Health spending by state of residence, 1991-2009. Medicare Medicaid Res Rev 2011;1:10.

² Kaiser Family Foundation analysis of National Health Expenditure (NHE) data from Centers for Medicare and Medicaid Services, Office of the Actuary (source: <http://www.healthsystemtracker.org/chart-collection/the-latest-health-spending-projections/>)

³ The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary (Source: <http://www.nap.edu/catalog/12750.html>)

⁴ Kaiser Family Foundation Study:

⁵ <http://www.health.ri.gov/publications/reports/2015HealthInventory.pdf>

Rhode Island has the building blocks for a healthy population: including world-class healthcare providers; top medical, nursing, and social work schools; an environment with places to walk and play; a growing community committed to healthy, local food sources; and state leadership that understands the benefits of leveraging these building blocks to improve the health of Rhode Islanders. However, we also face difficult roadblocks to improving the health of our population such as unacceptable levels of health risks, including lead in our housing stock, high opioid addiction rates, consistently increasing rates of children facing behavioral health challenges, and a significant number of residents with preventable chronic diseases. Thus, even with the building blocks for a healthy populations, our “health care delivery system” lacks coordination among providers, rewards them with little or no regard to the quality of the care provided and struggles to meet the needs of all patients in terms of access to care when needed.

Thanks to the support of the Centers for Medicare and Medicaid’s \$20,000,000 investment in Rhode Island’s healthcare system, the SIM Steering Committee and state staff team is bringing the SHIP plan to fruition. SIM is committed to maintaining an energetic level of stakeholder engagement in reform that together, will help build a new, more sustainable healthcare system in the state, based on value-based payments for care rather than on volume, equally prioritizing physical and behavioral health, and focused on addressing the social and environmental determinants of health. The new system will support the health of Rhode Islanders, improve their experience and maintain a lower cost burden for them, government, employers and payers across the state – toward our vision of the Triple Aim.

SIM Vision Statement – The Triple Aim

Improving the patient experience of **care** (including quality and satisfaction); Improving the **health** of populations; and reducing the per capita cost of **health care**.

Vision

The vision of the Rhode Island SIM Test Grant represents the desired future state resulting from transition to a value-based care in the state. Sometimes referred to as the “Triple Aim,” our vision statement reads:

*Continuously improving Rhode Islanders’ **experience of care** (including quality and satisfaction), enhancing the **physical and behavioral health** of all Rhode Island’s population, and **reducing the per capita cost** of healthcare for our residents.*

SIM Mission Statement

SIM is a multi-sectoral collaborative– with the patient in the center of our work. SIM is committed to an integrated approach to the physical and behavioral health needs of Rhode Islanders, carried out by moving from a fee-for-service health system to one based on value that addresses the social and environmental determinants of health. Our major activities will provide support to the healthcare providers and patients making their way through this new healthcare system so that it can be as effective as possible. Additionally, the new system is being built upon the philosophy that together - patients, consumers, payers, and policy makers – we are all accountable for maintaining and improving the health of Rhode Islanders.

The mission of the Rhode Island SIM Test Grant is to significantly advance progress towards making this vision a reality. To accomplish this, the following mission statement has been established:

Rhode Island SIM is a multi-sectoral collaborative, based on data—with the patient/consumer/family in the center of our work. Rhode Island SIM is committed to an integrated approach to the physical and behavioral health needs of Rhode Islanders, carried out by moving from a fee-for-service healthcare system to one based on value that addresses the social and environmental determinants of health. Our major activities will provide support to the healthcare providers and patients making their way through this new healthcare system so that it can be as effective as possible. Additionally, the new system is being built upon the philosophy that together—patients, consumers, payers, and policy makers—we are accountable for maintaining and improving the health of all Rhode Islanders.

SIM Theory of Change

Rhode Island's payment system is changing to focus more on value and less on volume. If SIM makes investments to support providers and empower patients to adapt to these changes, and we address the social and environmental determinants of health, then we will improve our population health and move toward our vision of the Triple Aim.

SIM Transformation Wheel

On the SIM Transformation Wheel graphic, (included on page 7 of the Operational Plan) the patients are in the middle of our SIM project, surrounded by the providers who care for them (Primary Care Providers, Specialists, Community Mental Health Center staff and Hospital and Long Term Care staff) and the community organizations, payers, and state institutions that are an integral part of the health system. The providers are people - not institutions - and through SIM, we can invest in building their ability to adapt to the new systems.

The SIM Steering Committee has chosen to make investments in four pillars of work, with the intent of having a measureable impact on Population Health and the reform of our healthcare system. Therefore, SIM will be supporting the following:

1) Investing in Rhode Island's Provider Workforce/Practice Transformation - This is the largest pillar, with a proposed budget of \$7.1 million. The components of workforce training and practice transformation include:

- Community Health Teams – with a specific focus on Community Health Workers and Health Coaches.
- Children's Behavioral Health – PCMH Kids and the Child Psychiatry Access Project – focused in part on training providers.
- Behavioral Health Transformation – including SBIRT to facilitate early identification and intervention with Substance Use Disorders; support for an Integrated Behavioral Health Program; Care Management Dashboards for Community Mental Health Centers; and a Practice Transformation Coaching program for Integrated Health Homes to establish an integrated continuum of care for individuals with Serious Mental Illness.
- Healthcare Quality, Measurement, Reporting, and Feedback System – with support and training for providers.

These investments in training, coaching, and technology improvements aim to add to the skills and resources of the providers working within a transforming health system.

2) Patient Empowerment - In order to ensure that patients receive the greatest value from payment reform changes, and that they are maximally engaged in positive health behaviors including self-advocacy, SIM will invest \$2.2 million to provide patients access to tools that increase their involvement in their own care. This includes creating the infrastructure to allow patients to more easily share their advanced care directives and healthcare proxies with their providers, plus other patient engagement tools such as health risk assessments and tools that measure behavior change readiness.

These investments will be integrated with other projects around the Wheel. For example, there are connections to be made between Community Health Teams and Patient Education, with the Teams able to assist patients with the empowerment tools and communicate back the patients' needs to other providers.

3) Increasing Data Capability and Expertise - Rhode Island's healthcare community agrees that we are not using data as effectively as we could be. We lack both standardized data collection, and training of staff responsible for collecting, inputting, and analyzing the data. SIM will invest \$5.3 million in this data capability pillar. First, our Statewide Common Provider Directory will allow Rhode Island to consolidate provider data from multiple sources into a single “source of truth” record with real-time and historical provider to organization relationships. SIM will support HealthFacts RI – our All Payer Claims Database – in supporting and maintaining data collection and validation, analytics and report development, and making data available for use. Finally, SIM will provide foundational funding for a modernized Human Services Data Warehouse, to create a data ecosystem that will be integrated; that will use analytic tools, benchmarks, and visualizations; and that will allow Rhode Island's policy needs to drive the analytics.

4) Shared decision-making authority through a strong public/private partnership
In order to achieve the changes described in this plan, and meet the objectives of the SIM grant, Rhode Island must have engaged key stakeholders representing state government, community organizations, payers, and providers. The SIM Steering Committee is the public/private governing body for Rhode Island's SIM project. Its function is to set strategic direction, create policy goals, approve the funding plan, and provide oversight over the implementation of the SIM grant.

The Integrated Population Health Plan

While providing high quality healthcare is the primary goal for the healthcare delivery system, the SIM project is also focused on helping individuals connect to disease prevention resources, increase early intervention to reduce late stage presentation for disease, and improve outcomes throughout care navigation for patients. As such, the SIM grant also requires Rhode Island to develop a plan for improving population health. A population health plan helps the state assess the health of all Rhode Islanders, determine the most significant needs, develop goals and strategies for addressing those needs, and implement the strategies to ensure all Rhode Islanders have the opportunity to achieve their highest health potential and have access to high quality health care throughout their lives. The SIM grant requires that the population health plan identify opportunities to:

- Advance population health as part of the state's proposed health system transformation activities.

- Maximize the impact of various state/ local activities on population health, quality of healthcare and healthcare costs.

Specifically, the population health plan must offer a detailed strategy to reduce state rates of the following SIM Population Health Plan priority areas:

- Tobacco use
- Obesity
- Chronic disease such as diabetes, heart disease and stroke
- Behavioral Health morbidity, with an initial focus on children with serious emotional disturbance, depression, serious mental illness in adults and opiate use disorders.

This Integrated Population Health Plan will serve two purposes. First, the population health plan will describe the health of Rhode Islanders and the current landscape of population health improvement efforts in the state across the SIM Population Health Plan priority areas; and second, the population health plan will provide frameworks, strategies, and goals for population health improvement planning efforts for the state to follow to ensure the sustainability of population health improvements.

Definition of Population Health

Health is not merely the absence of disease; health is the state of complete physical, mental and social well-being as well as the “ability to adapt and to self-manage, in the face of social, physical and emotional challenges.”⁶ Health is considered a resource for everyday life and is created where we live, learn, work, and play. Health-related behaviors, the receipt of recommended healthcare, and overall wellness occur in contexts; and these contexts are embedded in family/social networks, health care settings/practices, and the physical and social environment. (see Figure 1).⁷ As individuals navigate these various contexts, they may be exposed to differential levels of toxic exposures and stressful experiences that shape the kinds of choices they [can] make⁸, which ultimately impacts their health and collectively determines the distribution of health and wellness across the population.

Population health refers to the aggregation of health outcomes of a group of individuals selected based on a specific characteristics (such as geography, care setting, health status), including the distribution of such outcomes within and across groups.⁹ There are many factors that impede an individual’s ability to achieve his/her optimal health or to obtain the health care s/he needs. Throughout the life course these factors may gradually accumulate through exposures to adverse environmental and social conditions, behaviors that increase disease risk, and episodes of illness.¹⁰

Population health also includes a focus on the determinants of the health and the resulting outcomes across the life course from birth to death. Thus, population health includes multilevel, developmental, and life course perspectives that recognize the critical importance of early life/childhood experiences, the accumulation of exposures across the lifetime, and person-context interactions. (See Model 2 for some examples of determinants and health outcomes).

When “population health” is referenced here, the reference includes behavioral health, and behavioral health includes mental health and substance use disorders. “Behavioral Health” refers to a mental health and/or substance use disorders.

⁶ Huber M, van VM, Giezenberg M et al. Towards a 'patient-centred' operationalisation of the new dynamic concept of health: a mixed methods study. *BMJ Open* 2016;6:e010091.

⁷ Gary-Webb TL, Suglia SF, Tehranifar P. Social epidemiology of diabetes and associated conditions. *Curr Diab Rep* 2013;13:850-859

⁸ Bharmal N, Derose KP, Felician M, Weden MM. Understanding the Upstream Social Determinants of Health. RAND Social Determinants of Health Interest Group, editor. WR-1096-RC. 2015. RAND Health.

⁹ Kindig DA. Understanding population health terminology. *Milbank Q* 2007;85:139-161.

¹⁰ Kuh D, Ben-Shlomo Y. Introduction: a life course approach to the aetiology of adult chronic disease. In: Kuh D, Ben-Shlomo Y, eds. *A Life Course Approach to Chronic Disease Epidemiology*. New York: Oxford University Press; 2001;3-14.

Figure 1. Multilevel framework of social/environmental determinants of health (adapted from Gary-Webb, et al 2013)

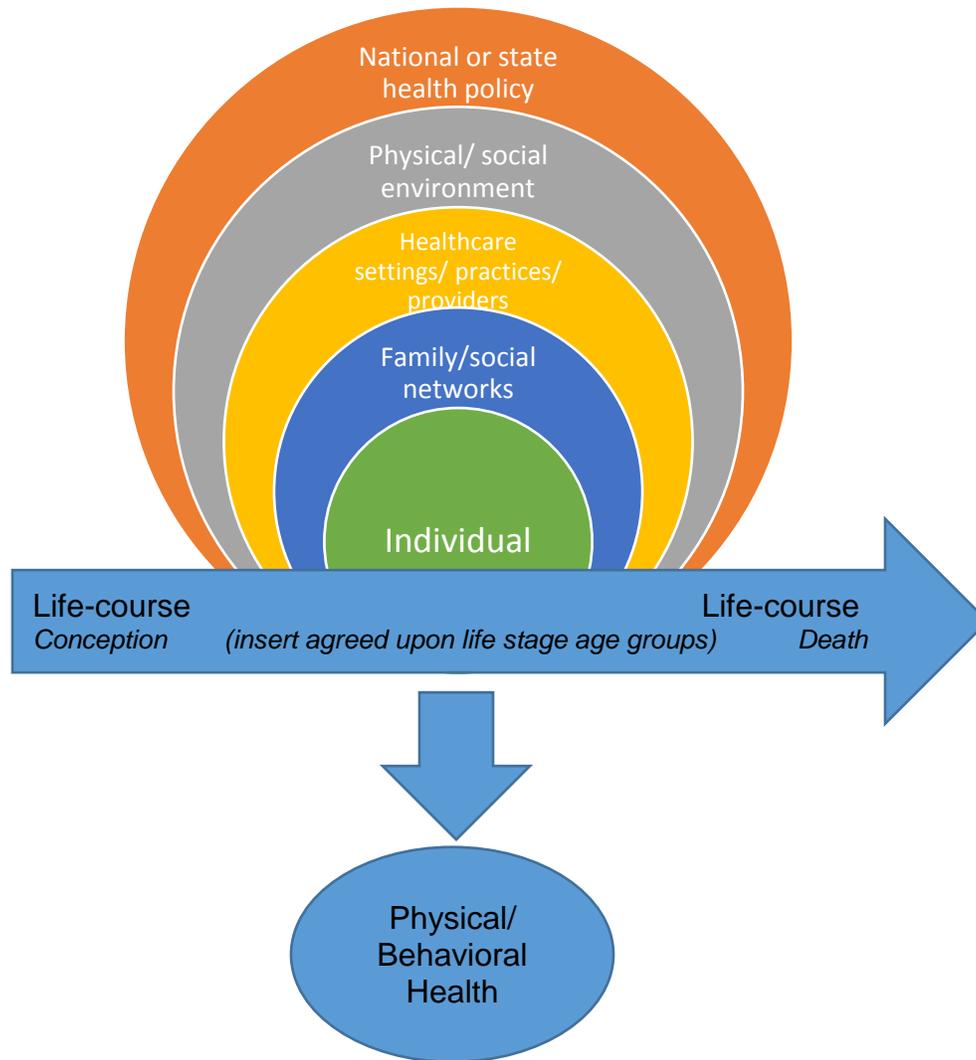
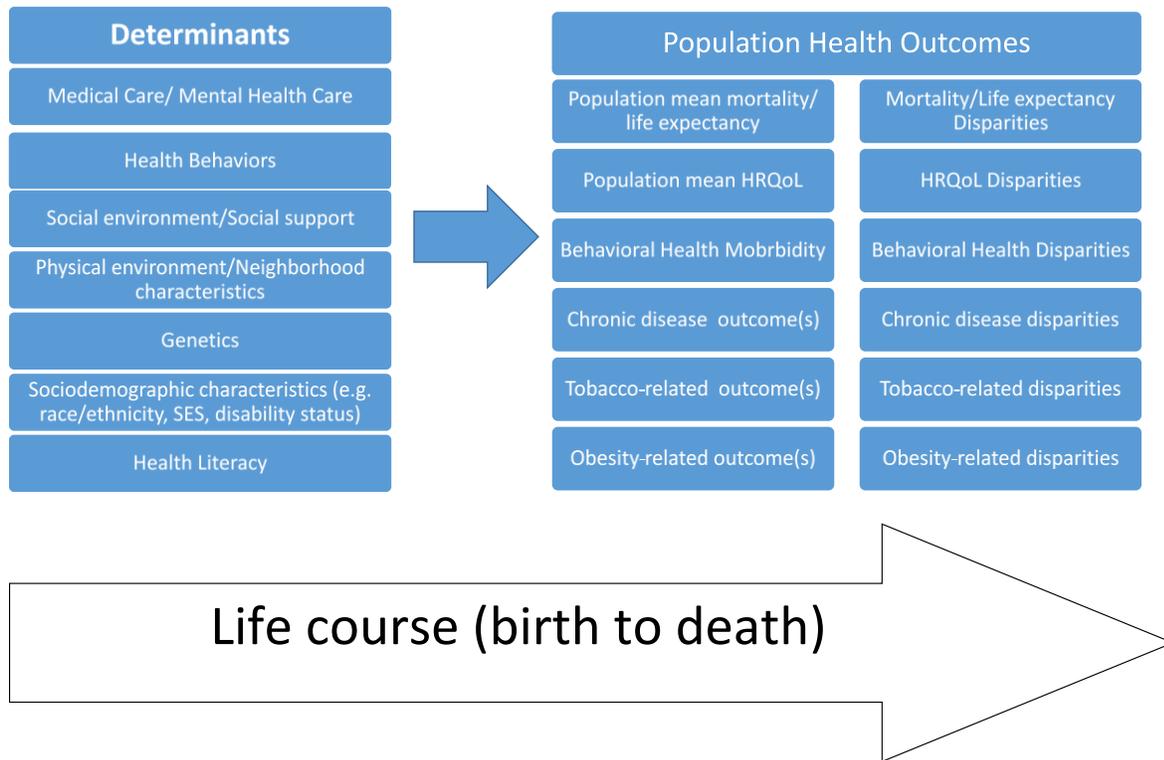


Figure 2. Draft Model of Population Health



Population Health Plan Philosophy

Rhode Island has assembled a diverse group of stakeholders from across the state to build a comprehensive and inclusive population health plan. Our partners draw from state and local government, the private sector, academia and various community organizations that have expertise in both public health and clinical care. This process has been guided by the same eight overarching principles that are fundamental to the entire Rhode Island SIM project, fully described in the Operational plan and outlined below:

- 1. We begin with a commitment to empowering individuals, families, and communities to improve their own health.***
- 2. We embrace our reliance on multi-sector and multi-agency collaboration.***
- 3. We commit to improve our ability to collect, share, and use data to drive action.***
- 4. We believe in an integrated approach to the physical and behavioral needs of Rhode Islanders.***
- 5. We are committed to transforming our healthcare delivery system by moving away from a fee-for-service payment model to a value-based approach.***
- 6. We remain aware of the importance of social and environmental determinants of health and health equity.***
- 7. We value consistent and reliable support for providers embarking upon practice transformation.***
- 8. We end with a commitment to addressing disparities on many levels.***

Description of overall health burden in the state

To meet the first priority of this Population Health Plan - describing the current overall health of Rhode Islanders, this section details overarching physical and behavioral health data, summarizes findings from related health planning initiatives and reports (including the most recent Community Health Needs Assessments) discusses other broader behavioral health findings and begins to identify communities experiencing health disparities or inequality.

Physical Health Morbidity/Mortality

Text is TBD. Will referencing morbidity, mortality and cost data as available.

Chronic Conditions

Chronic conditions affect a substantial number of Rhode Islanders (See Table 4a). Hypertension, diabetes, and depression are the most common, affecting roughly 165,000; 83,000; and 66,000 insured Rhode Islanders respectively. Not surprisingly, hypertension and diabetes increase with age; approximately 65% of Rhode Island older adults have hypertension.¹¹

Heart disease, stroke, diabetes, and depression are among the most common, costly, and preventable of illnesses in Rhode Island (see Table 5b).

Table 1. Life Expectancy at Birth (in years), by Gender (2009)

	Location	Female
1	Hawaii	84.7
2	Minnesota	83.3
3	California	83.1
4	Connecticut	82.9
5	New York	82.8
6	Massachusetts	82.7
7	Vermont	82.6
8	New Jersey	82.5
9	New Hampshire	82.5
10	Wisconsin	82.4
11	South Dakota	82.4
12	Rhode Island	82.3
13	North Dakota	82.3
14	Florida	82.3
15	Colorado	82.2
16	Utah	82.1
17	Arizona	82.1
18	Washington	82
19	Iowa	82
20	Nebraska	81.9
21	Oregon	81.8
22	Idaho	81.6
23	Maine	81.5
24	Illinois	81.4
25	Virginia	81.3
26	New Mexico	81.3
27	Maryland	81.3
	United States	81.3

¹¹ <http://www.health.ri.gov/publications/databriefs/2013AdultHealthRisks.pdf>

Figure 3: Total Number of Insured Rhode Islanders with select chronic conditions

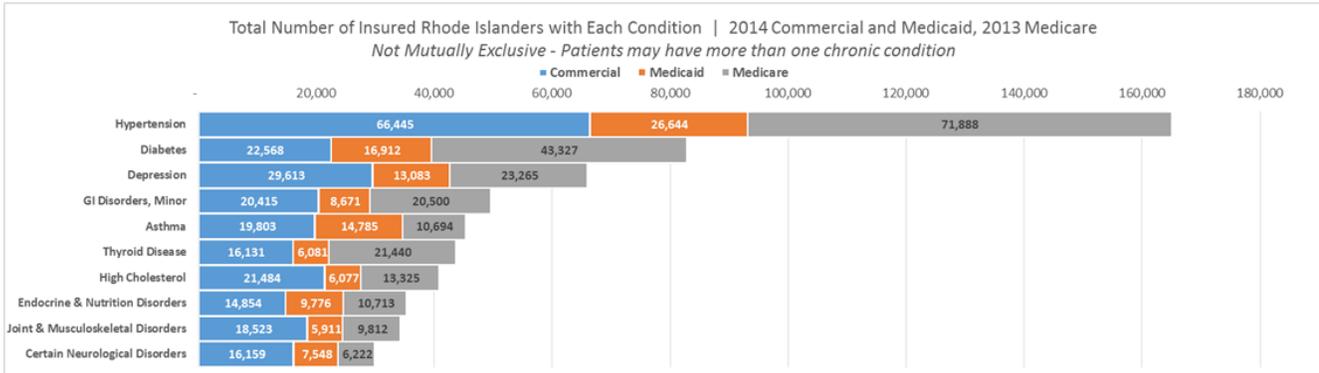
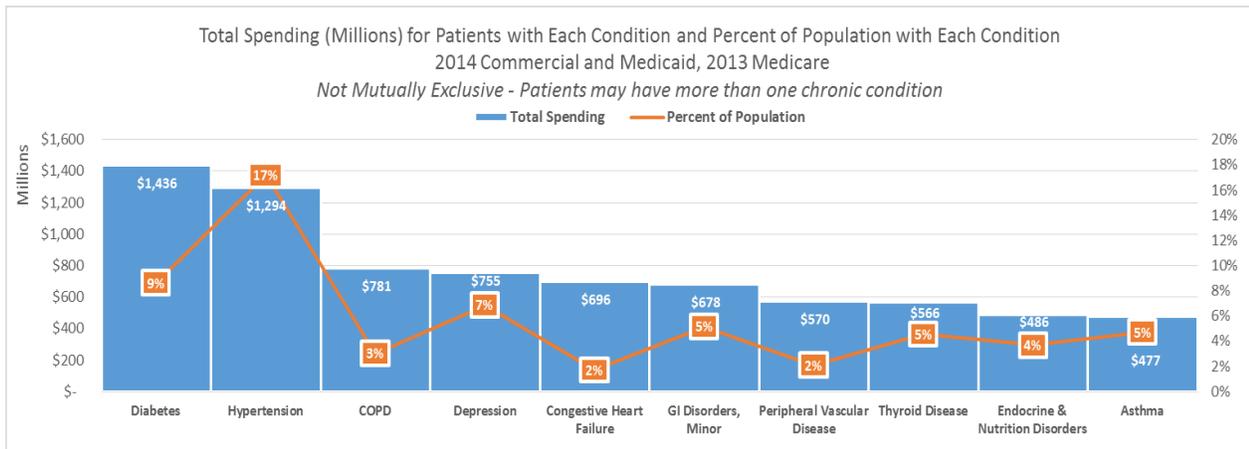


Figure 4: Ten most costly chronic conditions among insured patients in Rhode Island



Behavioral Health Morbidity/Mortality

Morbidity

In order to impact the long-term health of Rhode Islanders, efforts must address the prevalence of mental health and substance use disorders in all age groups. Depression is the third most highly reported chronic condition among Rhode Islanders across the lifespan.¹²

Children

The presence of behavioral health disorders among children in Rhode Island is a serious concern. More than one in five children had one or more “emotional/behavioral conditions.”¹³ Children are exposed to a number of risk factors that can lead to behavioral health disorders including high rates of poverty, living with mothers and/or fathers with behavioral health disorders, living in less positive home environments and exposure to trauma.

¹² HealthFacts RI data

¹³ “Children Who Have One Or More Emotional, Behavioral, Or Developmental Conditions,” Kids Count. Retrieved August 11, 2013, from <http://datacenter.kidscount.org/>.

According to the Institute of Medicine, “The period from conception to about age 5 represents a particularly significant stage of development during which changes occur at a pace greater than other stages of a young person’s life and the opportunity to establish a foundation for future development is greatest.”¹⁴ While the onset of diagnosable mental health disorders, such as anxiety typically occurs significantly later in childhood, building the solid foundation of developmental competencies in early childhood is essential. In young childhood there is a set of critical developmental factors: secure attachment, emotional regulation, executive functioning and appropriate conduct.¹⁵

For many children in Rhode Island, achieving these developmental competencies is challenging. During FFY 2015, there were 3,367 child maltreatment reports for children under age six that resulted in 3,270 completed investigations by the Rhode Island Department of Children, Youth and Families (DCYF).¹⁶ During this time:

- There were 1,450 victims of maltreatment under age six.
- The vast majority (85%) of indicated allegations (confirmed claims) of maltreatment of children under age six involved neglect, 11% involved physical abuse, and 1% involved sexual abuse.
- The largest category of neglect (41%) is lack of supervision. The second largest category of neglect (35%) is “exposure to domestic violence.”¹⁷

Maltreatment of young children is critical; these children are at high risk for developmental challenges. Infants and toddlers who have been maltreated are six times more likely to have a developmental delay than the general population. In addition, child maltreatment is often associated with other risk factors known to impair child development. More than half (55%) of maltreated infants and toddlers had at least five risk factors associated with developmental problems, and children with more than five risk factors have a 90% greater chance of delayed development.¹⁸ Rhode Island is required under the federal *Child Abuse and Prevention Treatment Act (CAPTA)* to refer all maltreated children under age three to Early Intervention for an eligibility assessment.

In 2011/12, 9.3% of children in Rhode Island ages 6 to 11 years old were living with mothers in poor mental health, higher than any other New England state and above the national average of 7.9%.¹⁹

The rates of children suffering from recurrent child abuse and neglect and abuse/neglect while in foster care placement exceed national standards²⁰. In addition, protective factors, such as enrollment in nursery school or preschool, are less prevalent among young children in Rhode Island than in the rest of the country. Children and adolescents in Rhode Island have high rates

¹⁴ *Preventing Mental, Emotional, and Behavioral Disorders Among Young People, Progress and Possibilities*, Committee on the Prevention of Mental Disorders and Substance Abuse Among Children Youth, and Young Adults: Research Advances and Promising Interventions; Mary Ellen O’Connell, Thomas Boat, and Kenneth E. Warner, Editors; National Research Council and Institute of Medicine of the National Academies, 2009, page 72

¹⁵ *Ibid*, pg. 78.

¹⁶ “Young Children in the Child Welfare System,” Kids Count Issue Brief, December 2015.

¹⁷ *Ibid*

¹⁸ *Ibid*

¹⁹ Truven Demand Report

²⁰ DCYF website

of depression, and the rates of ADHD diagnosis and use of marijuana and other illicit drugs exceeds the national average.²¹ The need for substance use disorder treatment among children and adolescents in facility placement almost tripled between 2009 and 2011²².

Adults

Behavioral health disorders are a concern for adult Rhode Islanders as well. The rate of adults diagnosed with any mental illness is high. The rates of adults diagnosed with a serious mental illness and adults reporting a major depressive episode exceed national averages. The rate of binge drinking among Rhode Islanders exceeds the national average. More than one in five adults, ages 18 to 24 years old, reported alcohol and/or drug abuse/dependence; this rate increased for Rhode Islanders during the same time that the national rate decreased. Reported drug use in the past month among 25 – 64 year old Rhode Islanders is almost double the national average.²³

Older Adults

According to the 2015 Truven report, adults ages 50 years and older reported frequent mental distress at higher rates than the national average. However, this difference leveled out for adults 65 years and older.²⁴

Mortality

According to a study reported by the National Center for Biotechnology Information, a meta-analysis of mortality in adults with serious mental health disorders showed a significantly higher rate of mortality than in the comparison population. A total of 67.3 percent of deaths were from medical causes²⁵. People with SMI have a reduced lifespan of at least 10 years. Smoking, along with obesity, contributes to the health risks in this population.²⁶

Suicide

Suicide is a very real concern in Rhode Island. In 2011, the Rhode Island Child Death Review Team issued a brief on suicide that revealed that 77 young people between 13 and 24 died by suicide in Rhode Island between 2005-2010.²⁷ Rhode Island Emergency Departments reported that during that same time period, about 500 youth were evaluated and treated each year as a result of attempted suicide²⁸. The suicide rate for adult Rhode Islanders age 34 to 65 years old increased by 69% between 1999 and 2010. One in sixty-seven Rhode Islanders attempt suicide.

²¹Truven demand Report

²² Ibid

²³ Truven demand Report

²⁴ Ibid

²⁵“Mortality in Mental Disorders and Global Disease Burden Implications, A Systematic Review and Meta-analysis” [Elizabeth Reisinger Walker](#), PhD, MPH, MAT, [Robin E. McGee](#), MPH, and [Benjamin G. Druss](#), MD, MPH; JAMA Psychiatry, 2015 April, 72(4) 334-41.

²⁶ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4553647/>

²⁷ “Youth Suicide Issue Brief (2005-2010),” Rhode Island Child Death Review Team. 2011.

²⁸ Ibid

Table 2: Indicators of Serious Mental Health and Substance Use Disorders Among Adults in Rhode Island, 2012/13

	Rhode Island			National Average		
	18 - 24	25-64	50+	18-24	25-64	50+
Experienced a Serious Mental Illness in Past Year	4.9%	5.0%	5.2%	4.2%	4.1%	3.1%
At least 1 Major Depressive Episode in Past Year	9.7%	8.2%	9.4%	8.8%	6.4%	5.4%
Illicit Drug Use or Abuse in Past Year	9.0%	2.6%	**	7.6%	1.7%	**
Illicit Drug Use in Past Month	31.8%	12.8%	6.9%	21.4%	7.2%	4.1%

** Data Not reported for this age group

Overdose

The death rate for all ages attributed to narcotics and hallucinogens more than doubled between 2011 and 2013; 239 Rhode Islanders died as a result of a drug overdose in 2014²⁹. Rhode Island is one of sixteen states in the country where the number of opioid related overdose deaths exceeds fatal motor vehicle deaths.³⁰ The highest rates of drug-related deaths in Rhode Island are in:³¹

1. Kent County
2. Providence County
3. Washington County
4. Newport
5. Bristol

Alcohol related motor vehicle deaths in Rhode Island also exceeded the national average.³²

Behavioral Health Cost Data

In 2013, Rhode Island spent \$853 million attributed to the direct costs for behavioral health treatment; this represented 1.6% of the gross domestic product, greater than the national average of 1.2%. The average medical cost per person with a behavioral health disorder in Rhode Island was higher than any other state in New England.³³

In Rhode Island in 2013, 39 percent of all spending on mental health and substance use treatment was for prescription drugs. Inpatient hospitalizations accounted for 17 percent of all spending, and treatment in clinics accounted for 14 percent. Another 6 percent was spent on physician treatment and 4 percent on treatment by other behavioral health professionals such as psychologists, clinical social workers, and counselors in private office settings. All other spending (19 percent) included the cost of nursing home care; transportation services; home health care; programs run by state agencies and the federal government that target specific

²⁹ Opioid Task Force Report

³⁰ Bradley Hospital CNA

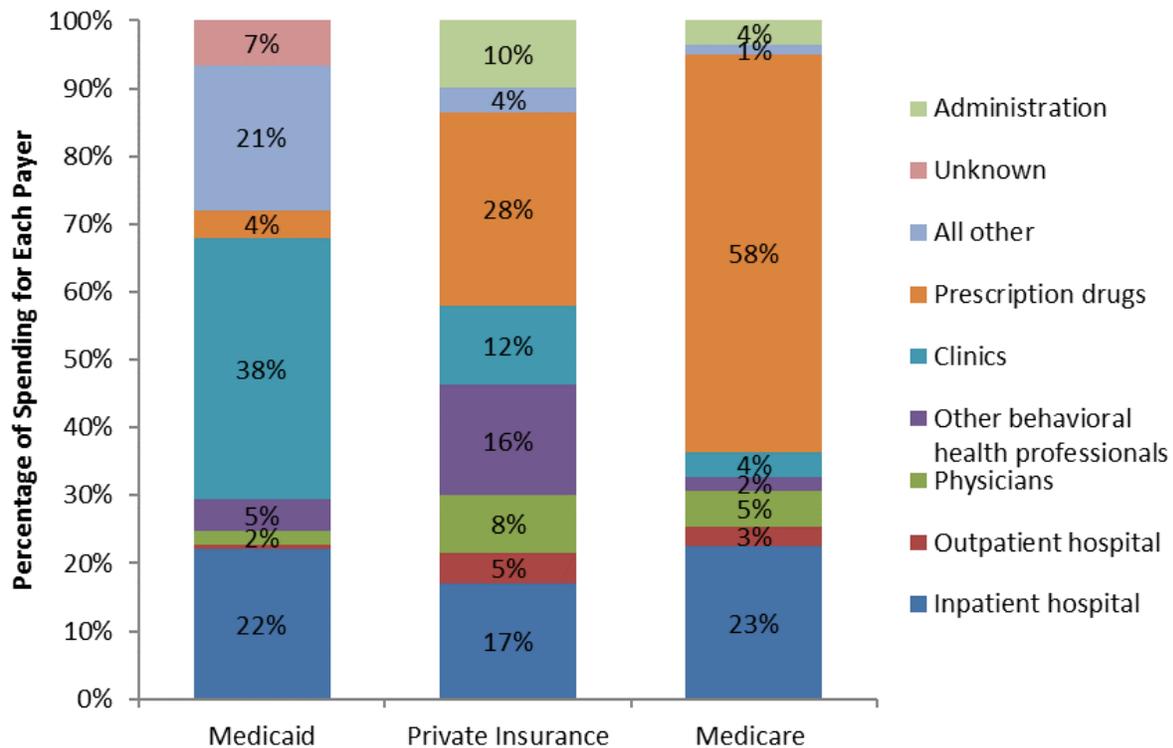
³¹ Hasbro Hospital CNA

³² Bradley Hospital CNA

³³ Truven Cost Report

populations (including services for prisoners, parolees, and individuals facing judicial proceedings; students; the homeless; and veterans); and administrative costs of private health insurance plans.

Figure 5: Distribution of Behavioral Health Spending in Rhode Island by Medicaid, Private Insurance, and Medicare, 2013*



Of the total expenditures for behavioral healthcare, Rhode Island payers spend only about 10% on substance use disorder treatment, despite the fact that substance use disorders are associated with high personal costs to Rhode Island residents and budgetary costs to the state in indirect expenditures. Rhode Island payers spend almost 9 times the amount on mental health treatment as substance use disorder treatment. Medications and inpatient treatment account for slightly more than 50% of the total spend; Hospital admissions for adults in Rhode Island were nearly twice as high as other New England states and the national average³⁴. Prescription medication for mental health disorder treatment accounts for 87% of behavioral health (BH) prescription costs, while prescription medications for substance use disorder treatment only accounts for 13%. for; The use of, and reimbursement for, medications to treat substance use disorders is increasing but still lags well behind.³⁵

³⁴ Truven Demand Report

³⁵ Truven Cost Report

Table 3

Adults, Aged 18–44 Years, Admitted to Hospital With a Mental Health Condition as the Primary Reason in New England and in the United States, 2010–2012

Location	2010		2011		2012	
	N	%	N	%	N	%
Rhode Island	3,834	1.01	4,126	1.09	4,036	1.07
Maine	2,369	0.55	2,652	0.62	2,461	0.58
Massachusetts	18,238	0.76	17,788	0.73	17,595	0.72
Vermont	1,099	0.52	1,240	0.59	1,019	0.48
National	689,801	0.62	682,564	0.61	690,665	0.61

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (SID), 2010–2012, from the following states: Rhode Island, Maine, Massachusetts, and Vermont and from a total of all 50 states

Notes:

1. Age range was 18–44 years, the closest available age group from HCUPNet.
2. Mental Health condition definition: the ICD-9 codes 295–302, 306–314, 6484, v402–v403, v409, v61, v663, v673, v701, v702, v710.

Spending per enrollee or per population on behavioral health treatment among Rhode Island residents with Medicaid, private insurance, and Medicare coverage generally is higher than spending in any other New England state. The high utilization of inpatient hospitalizations and greater spending on prescription drugs are consistent across payer types and likely contribute to the higher Rhode Island spending levels.

In addition to the direct costs, an estimated \$789 million, 9.5% of the state’s 2015 budget, was attributed to indirect costs associated with behavioral health disorders, costs attributed to the Department of Children Youth and Families, the Department of Human Services, disability benefits, the Department of Corrections and public safety.³⁶

Description of Other State Planning Documents Related to Reforming Rhode Island’s Health Care System

In recent years, the state of Rhode Island has commissioned several investigations into the current health of populations in Rhode Island, the performance of health reform efforts, and the remaining challenges. While these analyses and reports focus on different aspects of the healthcare delivery system, a recurring theme in the recommendations is the need for coordination and alignment between stakeholders, initiatives, and segments of the delivery system. A summary of these reports and their respective recommendations for policy is provided here.

³⁶ Ibid

Reinventing Medicaid

In February 2015, Governor Raimondo established the Working Group for Reinventing Medicaid with the duty to review the current Medicaid program and recommend specific quality improvement and cost containment measures for redesigning Medicaid¹¹. The group identified many shortcomings of the current program, including misaligned incentives across the delivery system, fragmented and non-coordinated service delivery, and an inability to address social determinants of health, that ultimately result in high costs and less than favorable outcomes. The Working Group's final report includes ten goals based on four principles: 1) Pay for value, not for volume; 2) Coordinate physical, behavioral, and long-term healthcare; 3) Rebalance the delivery system away from high-cost settings; and 4) Promote efficiency, transparency, and flexibility. The report suggests leveraging the role of SIM to define desired population health outcomes as well as a set of aligned measures that can be drawn upon to evaluate the success of the Reinventing Medicaid interventions. In order to achieve the goals set out in the report, the Working Group recommends robust stakeholder engagement and coordination between public and private healthcare reform efforts.

Governor's Working Group for Healthcare Innovation

Building on the successes of Reinventing Medicaid, the Governor's Working Group for Healthcare Innovation was established in July 2015 and charged with making recommendations to establish a global healthcare spending cap, tie payments to quality, create a statewide performance management framework for achieving population health goals, and develop a coordinated health information technology system¹². With the triple aim as the ultimate goal in mind, the Working Group articulated four major recommendations: 1) Create an Office of Health Policy to set statewide health policy goals and oversee effective implementation; 2) Hold the system accountable for cost and quality, and increase transparency through a spending target; 3) Expand the state's healthcare analytic capabilities to drive improved quality at sustainable costs; 4) Align policies around alternative payment models, population health, health information technology, and other priorities. Under the first recommendation, the Working Group calls for the creation of a comprehensive state population health plan, which would be best served by ongoing SIM processes that should combine existing state health planning documents and include details on quality metrics, capacity and needs planning, workforce development, and performance management.

Healthcare Utilization and Capacity Study

In late 2015 RIDOH, in consultation with the Health Care Planning and Accountability Advisory Council (HCPAAC), conducted a statewide healthcare utilization and capacity study as required by the Rhode Island Access to Medical Technology Innovation Act of 2014 (RI Gen. Laws § 23-93-5(b))¹³. The study collected data on the location, distribution, and nature of healthcare resources in healthcare settings across the state. Detailed surveys were completed by providers in primary care settings, outpatient specialty practices, behavioral health settings, hospitals, nursing facilities, assisted living residences, adult day care programs, home health settings, MRI imaging centers, ambulatory surgery centers, and dialysis centers.

A patient and community survey was also administered. A study of this magnitude had not been completed in Rhode Island since the 1980's. Results indicated an overall shortage of primary care providers, limited data on patient race, ethnicity, and primary language and lack of interpreter services, limited availability of assisted living residences for Medicaid patients, and persisting financial barriers to care. RIDOH recommends exploring strategies for recruitment

and retention of primary care providers, implementing uniform data collection of demographic information and identification of cost barriers, and improving access to community-based care. Data collection and analysis will be repeated annually, and the data collected will be used to establish and maintain a statewide health plan; similar to the Governor's working groups, the report suggests drawing on the work of SIM in the creation of a population health plan.

Truven Report

Around the same time, Truven Health Analytics was contracted by EOHHS, BHDDH, RIDOH and OHIC to conduct detailed analyses and develop a report evaluating current statewide demand, spending, and supply for the full continuum of behavioral health services in Rhode Island¹⁴. The analysis, published in September 2015, applied a population health approach by organizing population groups and evaluating need, prevention, and treatment services by lifespan stage. Key findings indicated that children in Rhode Island face higher risks for developing mental health and substance use disorders compared to other New England states, Rhode Island spends more on behavioral health than other states, and reporting and service delivery systems are fragmented. The report articulates three recommendations: 1) place greater investment in efficacious preventive services for children and families, 2) shift financing from high cost, intensive, and reactive services to evidence based services that promote patient-centered, outcome focused, coordinated care, 3) enhance infrastructure to promote population health based approach to behavioral healthcare.

Health Disparities Report

The Rhode Island Commission for Health Advocacy and Equity, a group established by statute in 2011 (RI Gen. Laws §23-64.1) and supported by RIDOH, submitted a report to the General Assembly in January 2015, detailing a study of health disparities in six key health areas: maternal and child health, asthma, obesity, diabetes, heart disease, and oral health¹⁵. The report focused heavily on the social determinants of health and disparities between groups of Rhode Islanders with regard to educational attainment, disability status, race and ethnicity, and income. In addition to specific health topic area recommendations, the report gives global recommendations for improving health equity. These include: adopting a health in all policies approach, improving systems for collecting health disparities data, strengthening Rhode Island's capacity to address health inequities, expanding partnerships, and coordinating efforts for action.

Rhode Island's Strategic Plan for Addiction and Overdose

The opiate epidemic, and increase in related deaths due to overdose, in Rhode Island spurred Governor Raimondo to issue Executive Order 15-14. The Order established creation of a broadly representative Task Force charged with developing a strategic plan for impacting opiate use disorders in Rhode Island. Co-chaired by the Directors of the BHDDH and RIDOH, the Task Force sought expert advisors who reviewed the existing literature on addiction and overdose; conducted over 50 interviews with local, national, and international stakeholders and experts; collected input from the Rhode Island community; and hosted two public forums with expert and community panels. These efforts culminated in "Rhode Island's Strategic Plan for Addiction and Overdose," which established the long-term goal of reducing overdose related deaths by one-third within the next three years. The Task Force issued a report of recommendations intended to move Rhode Island forward in meeting this goal, including: a "no-wrong door approach to accessing medication assisted treatment; increasing access to evidence-based treatment and recovery supports for opiate abuse/dependence; requiring training for physicians

and law enforcement personnel; reducing administrative barriers that limit access to opioid use disorder treatment; and requiring data collection and reporting on measure that will assess the impact of the proposed interventions.³⁷

HealthRIght Reports

A final series of reports offers a perspective outside the sphere of state government. HealthRIght, a healthcare reform advocacy group, issued a series of 3 reports in 2015 to provide an overview of Rhode Island's healthcare delivery system, discuss issues around access to care, and evaluate cost containment strategies¹⁶⁻¹⁸. The brief overview details the current state health work groups and reform efforts, and recommends stronger alignment and collaboration between them, while also improving access through investment in primary care and moving toward integration of primary and behavioral healthcare. HealthRIght's study on access to care concluded that while Rhode Island performs above average with regard to insurance coverage post-ACA, care is still not affordable for many and gaps and inefficiencies remain in care coordination. The evaluation of cost containment efforts in Rhode Island and other states led to the conclusion that the strategies most likely to impact costs are payment reform, investment in infrastructure, strong regulatory oversight, and consolidation of purchasing power.

Detailed descriptions of other state and federal innovation activities can be found under the section titled "SIM alignment with State and Federal Initiatives" in the Operational Plan.

Findings from Rhode Island Community Health Needs Assessments

Rhode Island's hospitals are currently preparing their 2016 Community Health Needs Assessments (CHNAs), which will build on the efforts and infrastructure created for the 2013 CHNAs reports.

In 2013, as in 2016, a majority of the state's hospitals worked with the Hospital Association of Rhode Island (HARI) to conduct a statewide Community Health Needs Assessment.¹ The report drew on data from the Behavioral Risk Factor Surveillance System (BRFSS) as well as secondary data on measures such as "mortality rates, cancer statistics, communicable disease data, and social determinants of health (poverty, crime, education, etc.)"¹

These data sources were later compiled on a HARI sponsored website, RIhealthcarenatters.org, to make the information easily available to the public. The website features not only data measures but maps, resources, and tools for generating reports on a range of topics, from access to health insurance to the violent crime rate. When available, data can be broken down by census tract, county and zip code. The site also compares Rhode Island data with Healthy People 2020 benchmarks to show where the state is at, below or above national standards and uses colors to show how the state or specific communities rank when compared to other parts of the country. Red indicates a poor rank, yellow indicates a fair performance and green indicates a good rank.² An outside contractor manages RIhealthcarenatters.org to ensure the website reflects the most updated version of each data source.³ So although the Hospital Association of Rhode Island is still completing its 2016 CHNA process, the RI Health Care Matters website provides a starting point for examining the most recent relevant surveillance data for the state.

³⁷ Rhode Island's Strategic Plan on Addiction and Overdose, 2015

The RI Health Care Matters features numerous healthcare related data, and here is a sample of some measures that are relevant to the SIM Integrated Population Health focus areas:

Table 4: Measures Relevant to SIM Integrated Population Health Focus Areas

	Statewide	Data source	Disparity data?	Measurement period	Healthy People 2020 target
Premature Death (years of potential life lost before age 75)	5,808 per 100,000 population	County health rankings	No	2010-2012	NA but “good” compared to other U.S. States
Adults who smoke	17.4%	BRFSS	Age, gender, Race/ethnicity	2013	Not met (12%)
Adolescent cigarette usage	8%	Youth Risk Behavior Surveillance System (YRBSS)	No	2013	NA
Adults with Diabetes	9.3%	BRFSS	Age, gender, Race/ethnicity	2013	NA but “good” compared to other U.S. States
Adults who are obese	27.3%	BRFSS	Age, gender, Race/ethnicity	2013	Met (30.5)
Age adjusted death rate due to stroke (Cerebrovascular Disease)	27.9 deaths per 100,000 population	Centers for Disease Control and Prevention (CDC)	Gender, Race/ethnicity	2012-2014	Met (34.8)
Poor Mental Health Days (average # of days mental health was “not good” in past 30 days)	3.6 days	County Health Rankings	No	2006-2012	NA but “fair” compared to other U.S. States

The Hospital Association of Rhode Island's 2013 Community Health Needs Assessment also relied on a series of key informant surveys with 49 Rhode Islanders including "elected officials, healthcare providers, health and human services experts, long-term care providers, representatives from the business community, and educators." When asked about the "three top health issues" they saw in their community, the three most cited issues were:

- Access to Health Care/Uninsured/Underinsured (mentioned by 82% of respondents)
- Mental Health/Suicide (mentioned by 47% of respondents)
- Overweight/Obesity (mentioned by 39% of respondents)

Substance abuse/alcohol abuse, Diabetes, and Maternal/Infant health were the next three most frequently mentioned health issues.

When asked about specific barriers to access to health care, respondents listed these top areas of concern (note that this work was completed before the full implementation of the Affordable Care Act and the expansion of Medicaid/availability of health insurance tax credits):

- Lack of Health Insurance Coverage
- Lack of Transportation
- Inability to Pay Out of Pocket Expenses

Survey respondents listed immigrants/refugees, the low-income/poor, the Hispanic/Latino population and Rhode Islanders with mental health needs as the most underserved populations in the state.

Two focus groups with a total of 21 local behavioral health care experts focused entirely on "mental health issues and resources within Rhode Island."¹ Participants listed these issues as their top behavioral health concerns:

- Increased substance abuse (especially among adolescents)
- Co-occurring mental illness and substance abuse
- Patients with complex conditions
- Relationship between mental and physical health.

The behavioral health experts listed adolescents, the elderly, the homeless and non-English speakers as the populations that are most underserved when it comes to mental health services. Focus group participants also stressed the need to better integrate primary care and mental health, provide regular mental health screenings of patients with chronic conditions, and support existing partnerships with schools and community organizations. Participants advocated for a shift away from treatment plans that were led by payers to ones that are led by providers, noting that current restrictions prevent them from offering the best treatments for their patients.

When the Hospital Association combined this qualitative data with its various data sources about the health of Rhode Islanders, it noted that the research revealed a number of "overlapping health issues." The CHNA report highlights these issues as the most prominent concerns for Rhode Island:

- **Access to Care**
Stakeholders raised specific concerns about the ability of Rhode Island’s uninsured/underinsured residents to access care. They also highlighted difficulties accessing some types of specialty care and a lack of bilingual providers.
- **Alcohol Use**
Data used in the CHNA report found a high density of liquor stores and higher reported rates of adult alcohol use when compared to national averages. Mental health professionals also discussed concerns about “co-occurring disorders with mental health issues and addiction.”¹
- **Asthma**
Rhode Island’s rate of adults who ever received an asthma diagnosis and those who still struggle with asthma are higher than rates in other parts of the country. Children in Rhode Island also have elevated asthma rates.
- **Breast Cancer Incidence**
Rhode Island has higher rates of breast cancer than other parts of the country, but death rates due to breast cancer are lower, indicating that patients might receive more effective treatment or earlier detection.
- **Mental Health Status**
Rhode Islanders report a higher than average number of days in the past month when poor physical or mental health interfered with their ability to function. There is also an elevated rate of residents with a “depressive disorder.” Stakeholders also identified mental health as one of the state’s key health issues, specifically stressing a lack of treatment options, which results in patients using the emergency room instead of more appropriate sources of care.
- **Overweight and Obesity**
At the time this report was written, 62.3% of Rhode Islanders were either overweight or obese. Data analyzed in the CHNA also indicates that Rhode Islanders exercise less than their peers in other states. Key stakeholders also voiced their concerns about the relationship between obesity and chronic diseases such as diabetes.

The Hospital Association of Rhode Island published these findings in one document, the *Community Needs Assessment Final report*, to offer a statewide perspective on the health of the state, but it also generated reports for each of its member hospitals, focusing on data specific to the needs of each medical center’s service area.

Lifespan Hospitals (Rhode Island Hospital, Bradley Hospital, The Miriam, Hasbro Children’s Hospital and Newport Hospital) did not participate in the Hospital Association’s CHNA process. The Community Health Needs Assessments for Lifespan hospitals focused on data specific to the service areas and priorities of Lifespan’s medical centers.

Community Health Needs Assessments conducted by Bradley and Hasbro Hospitals reported that “access to mental health services” was a significant health issues identified by respondents with members served by their hospitals.³⁸

³⁸ CNAs

For 2016, the Hospital Association is once again organizing a statewide assessment for its member hospitals. The new report includes findings from analyzing public health and utilization data. It also summarizes the results of “partner forums” with community partners and “focus groups” with health consumers. The final reports are scheduled to be approved by member hospitals this summer.⁴

Lifespan is also in the process of completing its data analysis and collection efforts for its 2016 CHNA report.

Additional Behavioral Health Findings from Community Health Needs Assessments

Inadequate access to behavioral health treatment is a commonly expressed concern in Rhode Island. Community Health Needs Assessments (CHNAs) conducted by the Hospital Association of Rhode Island³⁹ and individual assessments conducted by Bradley and Hasbro Hospitals reported that “access to mental health services” was a significant health issues identified by respondents with members served by their hospitals.⁴⁰

The Hasbro CHNA identified significant community concern about “boarders,” patients waiting in the emergency department for access to inpatient mental health services. Recognizing the need for more psychiatric care in the emergency room setting, Rhode Island Hospital has created a distinct location and protocol in the emergency department for treating psychiatric patients. Through the development of crisis management programs, the provision of diversion services, and the creation of space for clinicians, patients and their families, the program has made significant progress in reducing the number of boarders in the emergency departments (EDs) at Rhode Island Hospital and Hasbro Children’s Hospital. In 2012, the program had nearly 8,200 adult patient encounters and 540 pediatric patient encounters.⁴¹

Other relevant assessments of Behavioral Health in Rhode Island

Prenatal care

Several behaviors by child-bearing females are known to contribute to greater health risks for their unborn babies. According to the Truven Report, pregnant females in Rhode Island engaged in the following behaviors:⁴²

- 9.4% reported drinking alcohol within the last month of pregnancy
- 20% filled a prescription for opioid medication
- 10% smoked during the last 3 months of pregnancy

As more research emerges about the impact of alcohol use by pregnant women on their unborn children *during any stage of pregnancy*, there is a critical need for universal education about drinking and its effects on the wellbeing of unborn children. Healthcare conditions attributed to alcohol, drug and tobacco use during pregnancy can be reduced, if not eliminated, with increased education and prevention activity.

³⁹ CNAs

⁴⁰ CNAs

⁴¹ Hasbro Hospital CHNA, pg. 69.

⁴² Truven Supply Report

Children

There are several indicators of the lack of access to behavioral health treatment for children in Rhode Island.

- 34% of children were not able to access mental health services when needed
 - Disparities in receipt of mental health services when needed were significant: 75% of African American and 74% of Hispanic children did not receive treatment when needed, as opposed to 17.2% of White children.
- In 2013, 282 children and adolescents “boarded” in Rhode Island emergency departments an average of two days due to the lack of access to needed mental health treatment/placement.⁴³
- When a child or adolescent is ready to leave the psychiatric hospital and needs a “stepdown placement” of lesser clinical intensity but there is none available or there is no other safe placement at a treatment program or at home, they are referred to as “stuck.” Bradley Hospital reported having an average of four stuck kids per day in FFY 2014.⁴⁴
- DCYF out-of-state placements for children with behavioral health needs increased from 46 in 2012 to 87 in the first nine months of 2015⁴⁵.
- Only 8% of children/families served by the Maternal, Infant, Early Child Home Visiting Program, federally funded to provide evidence-based practices, resided outside of Rhode Island’s 4 Core Cities (Central Falls, Pawtucket, Providence and Woonsocket). Access to these practices appears to be limited outside of the 4 Core Cities.⁴⁶

The behavioral health services that do exist for children are dispersed among multiple state agencies including the Departments of Health, Children, Youth and Families, Education and to a lesser degree the Department of Behavioral Health, Developmental Disabilities and Hospitals.

Adults

While not as pervasive as the overall lack of services for children in Rhode Island, there are indicators of the lack of availability of a full array of behavioral health services for adults as well. Adults in Rhode Island are more likely to report unmet need for treatment of mental and substance use disorders than residents in the other comparison states.⁴⁷ Yet, the rate of psychiatric hospitalizations per 100,000 is higher in Rhode Island than any other New England state.⁴⁸

Following cuts in behavioral health funding beginning in 2007, Community Mental Health Centers no longer provided many evidence-based practices such as Assertive Community

⁴³ Truven Supply Report

⁴⁴ <http://www.rikidscount.org/Portals/0/Uploads/Documents/Factbook%202015/Health/Ind21-ChildrensMentalHealth-2015.pdf>

⁴⁵ Ibid

⁴⁶ Ibid

⁴⁷ Ibid

⁴⁸ Truven Cost Report

Treatment teams, mobile crisis services and crisis beds, and trauma informed care services that were effective in diverting individuals from unnecessary admissions to EDs and inpatient beds.

Rhode Islanders have lacked prompt access to the care coordination and recovery supports that can help to prevent homelessness and divert interface with high-end medical services and the police. Enhanced care coordination is needed to ensure effective transitions from high-end services such as inpatient, incarceration and homeless shelters/transitional housing. The Integrated Health Home initiative which is just being implemented and the potential for Certified Community Behavioral Health Clinics may go a long way in addressing this need when fully operational. There is also limited access to Peer support and permanent supportive housing, evidence-based practices in promoting Recovery.

Finally, the Opiate Task Force established in 2015 estimates that 20,000 Rhode Islanders have a diagnosable opioid use disorder but are not receiving medication-assisted treatment, which when combined with therapy is effective in treating the disorder. About half of physicians certified to prescribe Buprenorphine are not serving their permitted capacity of 100 patients. While covered by Medicaid, Naloxone is not covered by all insurances in Rhode Island.

Older Adults

Older adults are not likely to seek specialty behavioral health services and often remain isolated as a result of undetected depression. Primary care practitioners may miss diagnosing BH disorders among older adults who are less likely to discuss their symptoms. When medication is prescribed, elders are less likely to take it according to directions. The Hospital Association of Rhode Island identified that elders with BH disorders typically do not receive adequate treatment in nursing facilities and when behaviors escalate, are taken to EDs and often prohibited from returning to the facility.

Communities with Health Inequality/Disparities

More Physical health text to be inserted.

The Homeless Community

Consistent with the national landscape, individuals who are homeless consume a disproportionate amount of Rhode Island's resources. One-third of individuals seeking services at an emergency shelter or transitional housing setting in 2014 reported having a mental health issue, more than half were assessed as having problems with alcohol and one-quarter as having problems with illicit drugs. In addition to behavioral health disorders, individuals who are homeless often have untreated chronic medical conditions. These co-morbidities result in high costs associated with ambulance transports, emergency room admissions, inpatient hospitalizations including for mental health reasons and interactions with the police.⁴⁹

Over a third of the homeless in Rhode Island spend a majority of nights sleeping on streets, in parks, in vehicles, and in other places not meant for habitation instead of sleeping in a shelter. Since these individuals have clear, existing vulnerabilities, living outside poses additional threats to safety, health, and well being. Not only are these individuals disproportionately at risk

⁴⁹ RI Homeless Management Information System, VI-SPDAT surveys

of being physical attacked, but are also exposed to often harsh weather conditions that pose very real threats to life and health.⁵⁰

The cost of homelessness in Rhode Island goes beyond the health and well being of individuals; the utilization of expensive emergency medical and mental health services is vastly higher than that of the general population. According to a 2012 report published by the Special State Commission to Study Emergency Department Diversion, the average cost of an emergency department visit in Rhode Island is \$2,101, and the average cost for an Emergency Medical Service run is \$580 in Providence.⁵¹ A report by the Office of the Health Insurance Commissioner in 2010 listed the average cost of an in-patient hospitalization to be \$3,238 per day.⁵²

A study of the rates of service utilization reported by 885 homeless individuals (1,808 emergency department visits, 864 ambulance rides, and 698 in-patient hospitalizations) over the most-recent 6-month period yielded an estimated cost for medical treatment exceeding \$6.5 million.⁵³ There is opportunity to significantly reduce medical expenses and improve healthcare outcomes for this population. Providing permanent housing and supports to assist people in stabilizing their health and accessing preventive treatment has been shown to be considerably less costly, as individuals' utilization of emergency services decreases significantly once housed. The Special State Commission to Study Emergency Department Diversion cited the average annual savings per person to be \$8,839 as people were placed in a Housing First program with a high level of support."⁵⁴

Other Underserved Populations

Other populations that are most underserved due to the lack of trained providers and specialty targeted interventions include LGBTQ, non-English speaking, persons with intellectual and developmental disabilities (IDD), autism, brain injuries and youth with substance use disorders.

Current Status of Efforts to Address Health Priority Areas

This section of the Integrated Population Health Plan moves from describing the overall health of Rhode Islanders to focusing on a particular set of health priority areas. We first explain our reasons for choosing these priorities and proceed to describe the current prevalence of these conditions/behaviors in Rhode Island. From there, we discuss current initiatives to address these priorities and begin to discuss approaches for making dramatic change in the future.

⁵⁰Bunzli, L. and Hirsch, E. "Zero 2016 Rhode Island: A Report on the State of Homelessness". Rhode Island Coalition for the Homeless, 2015.

⁵¹ Special Senate Commission to Study Rhode Island Emergency Department Room Diversion. Findings and Recommendations. 2012.

⁵² Office of the Health Insurance Commissioner. Variations in Hospital Payment Rates by Commercial Insurers in Rhode Island. 2010.

⁵³ Bunzli, L. and Hirsch, E. "Zero 2016 Rhode Island: A Report on the State of Homelessness". Rhode Island Coalition for the Homeless, 2015.

⁵⁴ Ibid

Rhode Island's Population Health Priority Areas

Rhode Island's population health plan focuses its efforts on four major health areas:

- Tobacco Use
- Obesity
- Chronic diseases: Diabetes, heart disease and stroke
- Behavioral health morbidity, initially targeting depression, serious mental illness, opiate use disorders and children with social and emotional disturbance.

The selection of the health priority areas of tobacco use, obesity, chronic diseases, depression, serious mental illness, opiate use disorders and children with social and emotional disturbance was motivated by the significant prevalence and cost of these health areas to Rhode Island. Addressing the high prevalence and substantial cost is a high priority across our state. Our interagency leadership chose to expand the scope of diabetes to include two other major chronic illnesses because of input from the state department of health. We also added specific behavioral health morbidities because of the high priority the Steering Committee is placing on addressing behavioral health needs.

Given more time, the team working on the population health plan will explore other interests of the Steering Committee including topics specifically related to children's health.

Multi-morbidity

Our team also acknowledges that none of these specific diseases, conditions or behaviors exist in isolation. In many cases, it is the combined effect of these health priority areas that have an especially detrimental effect on the wellbeing of Rhode Islanders.

As we explore each individual health priority area, we will continue to examine data related to the presence of multiple chronic conditions, known as "multi-morbidity."

Some initial facts related to multi-morbidity:

Multi-morbidity has been shown to be associated with increased use of health services.⁵⁵ It is also negatively associated with adult socioeconomic status and socioeconomic status in childhood.^{56 57}

Of the 58,000 adults and 12,000 children who were treated at a Community Mental Health Center (CMHC) between 7/1/2012 and 6/30/2015

- 54% had a medical claim associated with treatment for a co-occurring heart condition
- .1% had a medical claim associated with treatment for cancer
- 5.9% had a medical claim associated with treatment for a respiratory disorder.

⁵⁵ Payne RA, Abel GA, Guthrie B, Mercer SW. The effect of physical multimorbidity, mental health conditions and socioeconomic deprivation on unplanned admissions to hospital: a retrospective cohort study. *CMAJ* 2013;19;185:E221-E228.

⁵⁶ Luo, Y. and Waite, L.J. (2005) The impact of childhood and adult SES on physical, mental, and cognitive well-being in later life. *Journal of Gerontology: Social Sciences*, Vol 60B (2): S93-S101.

⁵⁷ Tucker-Seeley, R.D.; Li, Y.; Sorensen, G.; Subramanian, S.V. Lifecourse socioeconomic circumstances and multimorbidity among older adults. *BMC Public Health*, 2011, 11:313.

In addition, a number of study results have linked the use of antipsychotic medications with weight gain, diabetes, dyslipidemia, insulin resistance and the metabolic syndrome.⁵⁸ The clustering of physical chronic conditions with mental illness presents substantial care coordination and medication management and patient adjustment issues that influence the cost of care.

Data Measures Approach

The population health consultants are working with ProvPlan to identify measures for the SIM health priority areas. We are reviewing population datasets at the RIDOH (e.g. BRFSS), recommended measures from national measures sets (e.g. NQF) for the SIM health priority areas, and the aligned measures approved by the SIM measurement alignment group. **Table 7** offers a sample of our potential measures.

Once we have gathered all relevant potential data measures, the team will use our “Criteria for prioritization of population health measures” to select the most relevant metrics for the Integrated Population Health Plan. **Table 8** details our approaches

Table 5: Examples of potential metrics for SIM health priority areas

Metric:	Collection Scope	Geography	Source	NQF#	Disease Continuum
Obesity, Physical Activity					
Percent of adults who are obese.	Population-Based Survey	State	BRFSS		Diagnosis
Percent of high-school children who are obese.	Population-Based Survey	State	YRBS		Diagnosis
Percent of adults meeting physical activity guidelines	Population-Based Survey	State	BRFSS		Prevention
Percent of older adults discussing physical activity with physician.	Patient-Based Survey	Health Plan	NCQA	#0029	Prevention
Diabetes					
Percent of adults with diabetes	Population-Based Survey	State	BRFSS		Diagnosis
Age of onset of diabetes.	Population-Based Survey	State	BRFSS		Diagnosis
Percent of adults with diabetes who report at least 2 A1C measurements in past year	Population-Based Survey	State	BRFSS		Treatment
Tobacco Use					
Current adult smoking status	Population-Based Survey	State	BRFSS		Diagnosis
Attempts at smoking cessation in past year	Population-Based Survey	State	BRFSS		Treatment
Percent of high-school students who use tobacco products	Population-Based Survey	State	YRBS		Diagnosis

⁵⁸ Ibid

Metric:	Collection Scope	Geography	Source	NQF#	Disease Continuum
Smoking behaviors of women before, during, and after pregnancy	Population-Based Survey	State	PRAMS		Diagnosis
Heart Disease					
Prevalence of adults with heart disease	Population-Based Survey	State	BRFSS		Diagnosis
Prevalence of adults with hypertension	Population-Based Survey	State	BRFSS		Diagnosis
Cardiovascular Mortality Rate	Clinical Data	State	NVS		
Heart Failure Admission Rate	Administrative Claims	Health Plan	AHRQ	#0227	
Stroke					
Prevalence of adults who have had a stroke	Population-Based Survey	State	BRFSS		Diagnosis
Acute Stroke Mortality Rate	Administrative Claims	Health Plan	AHRQ	#0467	
Health Related Quality of Life					
Self-reported general health descriptions	Population-Based Survey	State	BRFSS		
Self-reported mental health descriptions	Population-Based Survey	State	BRFSS		

Table 6. Criteria for prioritization of population health measure (adapted from the Ohio population health planning document)

Criteria	Description	Source
<i>Describe the issue</i>		
Magnitude of the issue (high burden)	High prevalence of health outcome (number or percent of Rhode Islanders or population of interest affected)	
Severity of the issue	Risk of morbidity or mortality associated with the issue	
Magnitude of health disparities and impact on vulnerable population	Size of the disparity between socio-demographic groups; Differential impact on children, families living in poverty, individuals with disabilities	
Comparison with benchmarks (national, other states)	Compared to US overall, other states similar in demographic profile	
Trends	Extent to which issue has been getting worse in recent years	
<i>Impact on healthcare costs and employment/productivity</i>		
Impact on healthcare costs—total costs	Contribution of the health issue to healthcare costs for all payers—total costs	
Impact on employment and productivity	Impact of health issue on person's ability to and keep employment	
<i>Potential for impact</i>		

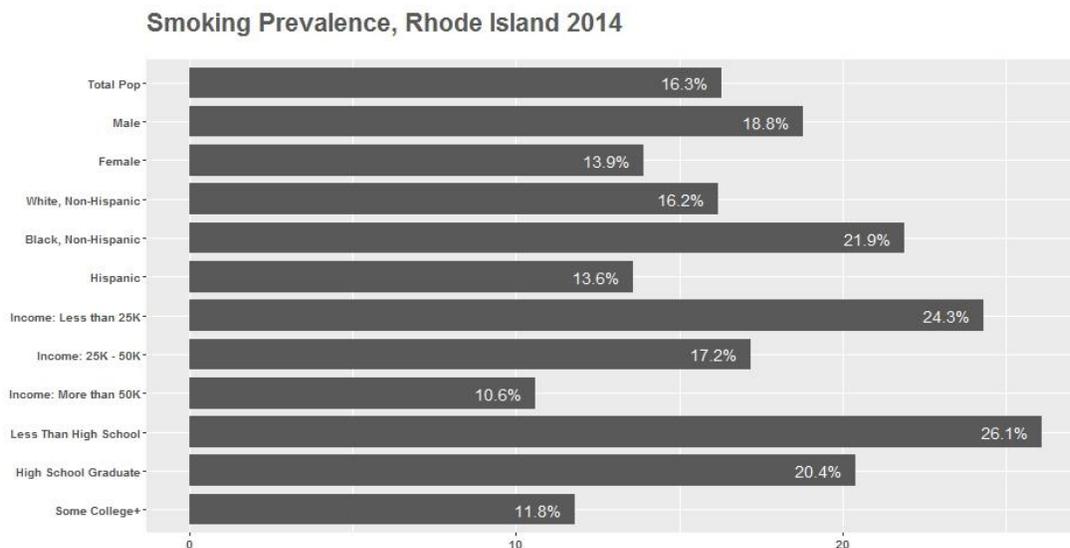
Preventability of health issue	Research evidence suggests that health issue largely caused by health behaviors, community environment and/or other potentially modifiable factors (other than genetic or biological characteristics) that can be addressed by programs, policies, and/or interventions.	
Availability of evidence-based strategies	Evidence of population based strategies	
Ability to track progress	Data systems available (or will be available) to track issue and impact of strategies implemented	
<i>Opportunity for community-clinical linkages</i>		
Alignment with other SIM measures	Related/similar to other “core measures” from SIM measures alignment	
Strategies available to link “whole-person” care providers with community-based prevention efforts	Evidenced based strategies/tools/models are available for “whole-person” care providers to connect patients with community-based prevention/intervention programs	

Health Priority Areas: Current Prevalence and Historic Data

Tobacco Use: prevalence

According to the most recent results from the 2014 Behavioral Risk Factor Surveillance System (BRFSS), 16.3% of Rhode Island adults self-report that they are smokers.

Figure 6: Smoking Prevalence



Smokers by Subgroups

According to this same data, Black, Non-Hispanic Rhode Islanders are more likely to be smokers than any other racial/ethnic group in the state with a smoking rate of 21.9%. Our analysis of disparities is limited by this data set. Small sample sizes among other groups, such as Multi-racial, non-Hispanic Rhode Islanders, prevent us from drawing any conclusions about

racial/ethnic communities other than White, Non-Hispanic, Black Non-Hispanic and Hispanic Rhode Islanders.

However, based on the available data, it is income and educational levels, more than race/ethnicity that show a more dramatic picture of smoking disparities. Rhode Islanders with an annual household income of less than \$25,000 a year self report a smoking rate (24.3%) that is more than double the self-reported rate of smokers among Rhode Islanders that have an annual household income of more than \$50,000. In general, Rhode Island smoking rates go down as income goes up.

The same is true of educational levels. Rhode Islanders without a high school diploma have the highest rate of smoking, at 26.1%. That rate drops dramatically to 11.8% among Rhode Islanders with at least some college education.

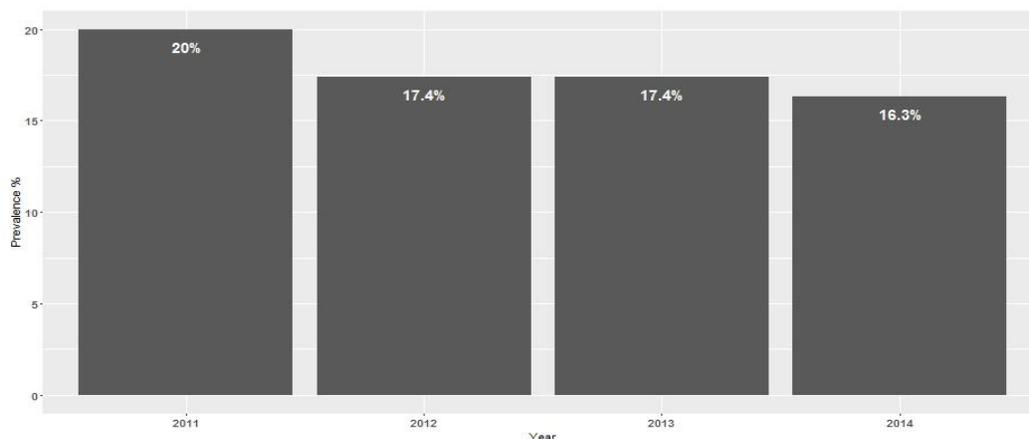
There is also significant data that indicates people with behavioral health needs have higher rates of smoking than the general public. A Position Statement on Health and Wellness for People with Serious Mental Illness issued by Mental Health America⁵⁹ identified that nationally:

- 44% of all cigarettes smoked in the U.S. are consumed by people with a mental illness.
- 56% to 88% of people with schizophrenia smoke compared to 25% of the general public
- People with schizophrenia who smoke have a higher toxic exposure than other smokers: they smoke more cigarettes and consume more of each cigarette.

Smoking: Historic Trends

Although smoking rates vary among Rhode Island’s sub-populations, all have experienced a decline in smoking over the past 10 years. In 2011, BRFSS began including cell phone numbers for its telephone survey, so data before 2011 is not technically comparable to data collected in 2011 and beyond. However, even between the short time span between 2011 and 2014, smoking prevalence has dropped from 20% down to 16.3%.

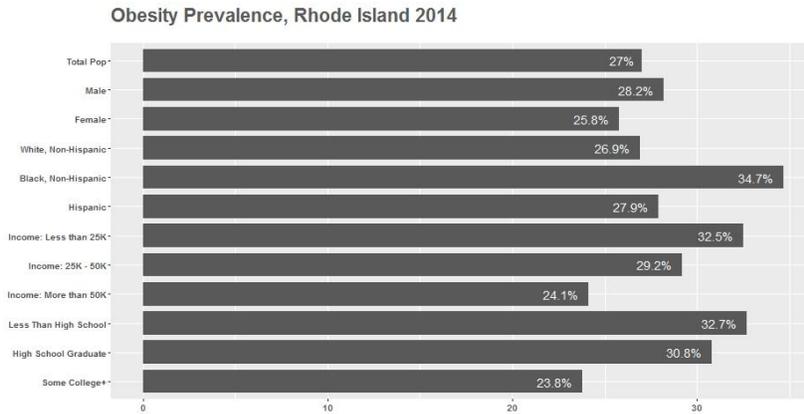
Figure 7: Smoking Over Time
Smoking Prevalence, Rhode Island 2011 - 2014



⁵⁹ MHA Position Statement #16: Health and Wellness for People with Serious Mental Illness

Figure 8: Obesity Prevalence

According to the most recent results from the 2014 Behavioral Risk Factor Surveillance System (BRFSS), 27% of all Rhode Islanders are obese.



Obesity by Subgroups

Based on the available data, Black, non-Hispanic Rhode Islanders have the highest rates of obesity at 34.7%. Men are slightly more likely than women to be obese (28.2% of males are obese compared to 25.8% of females.)

Disparities by income and educational levels exist, but are not as dramatic as the data we see for smoking rates. It is still true that as educational levels and incomes increase, obesity rates go down.

As with smoking rates, national data shows that people with behavioral health issues are also more likely to struggle with maintaining a healthy weight.⁶⁰ According to Mental Health America:

- People with Depression are 1.2 to 1.8 times more likely than the general public to be obese.
- People with Bipolar Disorder are 1.5 to 2.3 times more likely than the general public to be obese.
- People with Schizophrenia are 3.5 times more likely than the general public to be obese.

In addition, a number of study results have linked the use of antipsychotic medications with weight gain, diabetes, dyslipidemia, insulin resistance and the metabolic syndrome.⁶¹

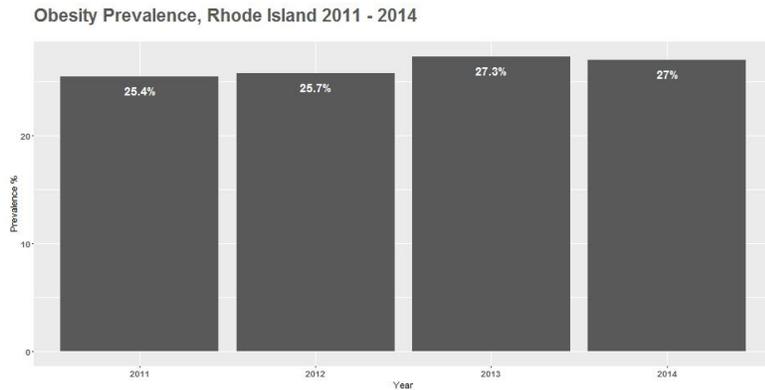
Obesity 2011-2014

The rate of obese Rhode Islanders has steadily increased over time. Even between 2011-2014, obesity rates have gone up from 25.4% to 27%.

⁶⁰ MHA Position Statement #16: Health and Wellness for People with Serious Mental Illness

⁶¹ Ibid

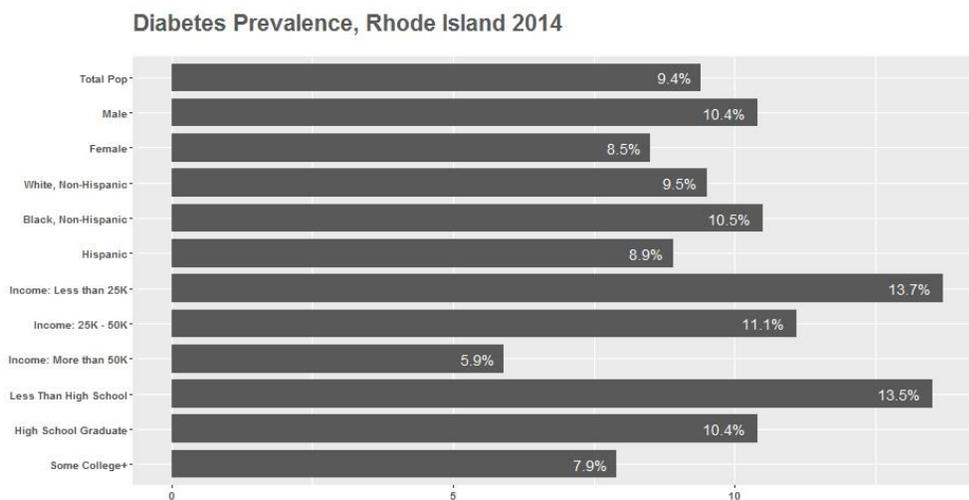
Figure 9: Obesity Prevalence



Diabetes: Prevalence

According to the most recent results from the 2014 Behavioral Risk Factor Surveillance System (BRFSS), 9.4% of Rhode Islanders have been diagnosed with Diabetes.

Figure 10: Diabetes Prevalence



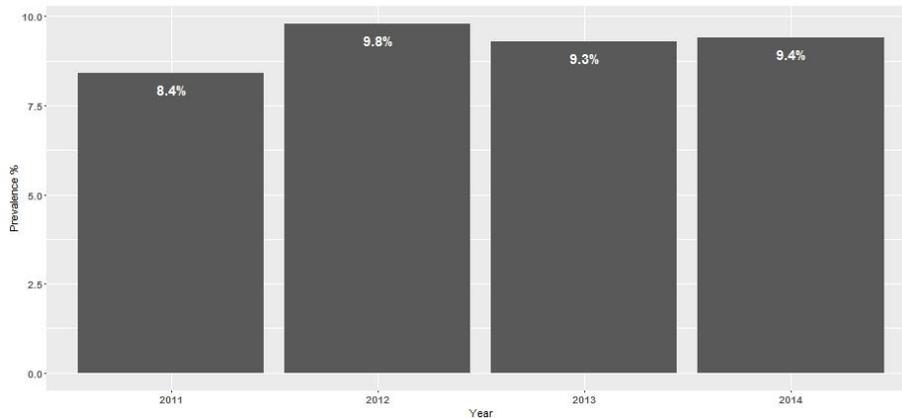
Diabetes by Subgroups

Yet again, Black, Non-Hispanic Rhode Islanders show the highest prevalence in this health priority area. However, the difference between racial/ethnic communities here is not especially dramatic. In fact, the rate of Black, Non-Hispanic Rhode Islanders with Diabetes is statistically the same as the rate of male Rhode Islanders with Diabetes.

The more dramatic differences again exist in the income and educational levels of Rhode Islanders. As income and educational levels go up, rates of Diabetes go down.

Figure 11: Diabetes Prevalence Over Time

Diabetes Prevalence, Rhode Island 2011 - 2014



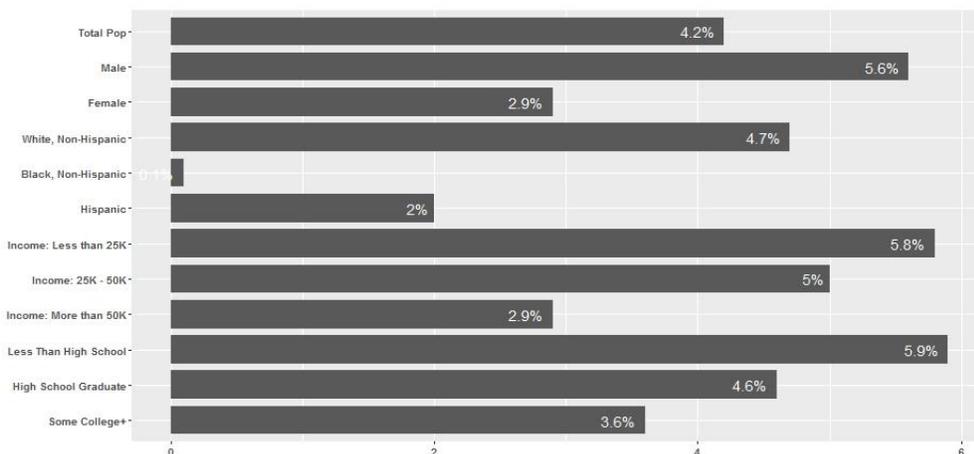
The available, comparable data mapping Diabetes in Rhode Island between 2011-2014 shows a jump in diabetes rates from 8.4% in 2011 to 9.8% in 2012. In 2013 the rate of diabetes drops slightly and then levels off in 2014.

Heart Disease and Stroke: Prevalence

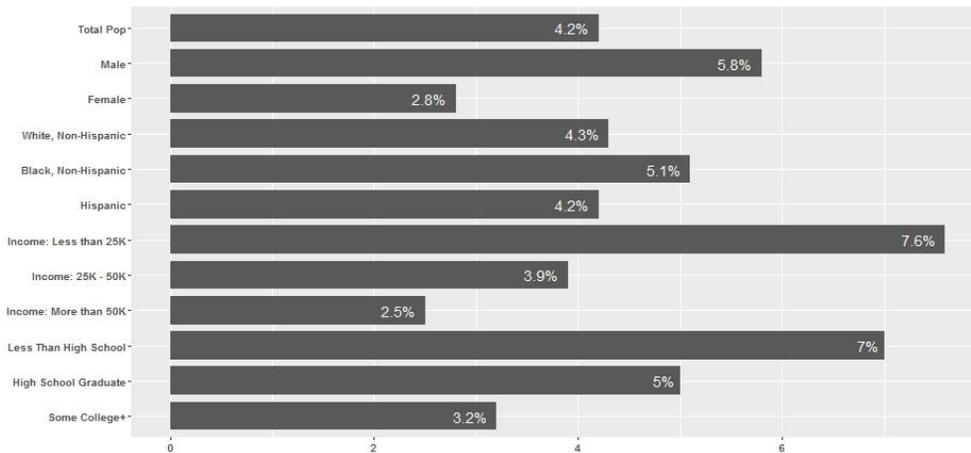
The Rhode Island version of the BRFSS poses this question “Has a nurse, doctor, or other healthcare professional ever told you that you had...” and allows respondents to select among a series of health conditions. Three of those conditions are Heart Disease/Angina, Heart Attack/Myocardial Infarction and Stroke. In 2014, 4.2% of Rhode Islanders reported being diagnosed with Heart Disease/Angina, 4.2% reported being told they’d have a heart attack/myocardial infarction and 2.5% reported being told they had a stroke.

Figure 12: Coronary Heart Disease, Heart Attack, and Stroke Prevalence

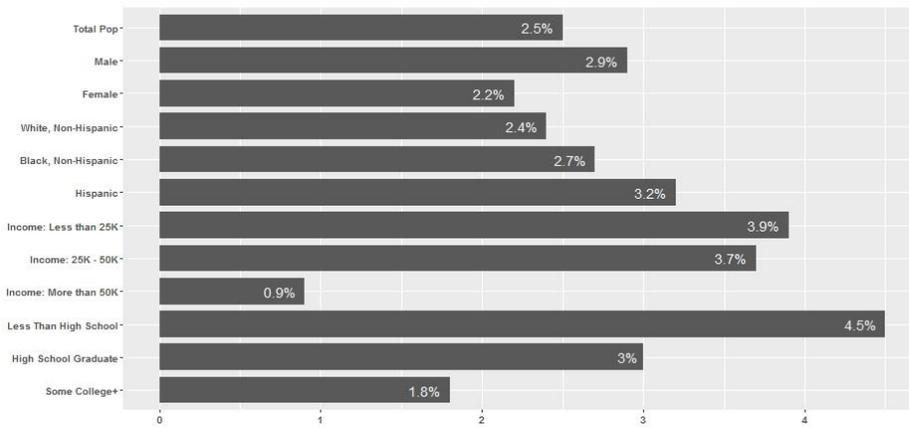
Coronary Heart Disease Prevalence, Rhode Island 2014



Heart Attack Prevalence, Rhode Island 2014



Stroke Prevalence, Rhode Island 2014



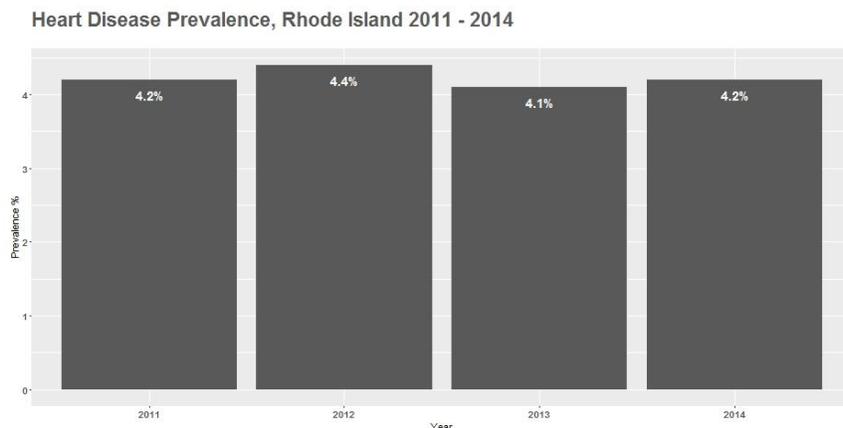
Heart Disease and Stroke by Subgroups

BRFSS data for heart disease, heart attacks and stroke all show an increased prevalence among males compared to females. The rates of these conditions all continue to go down as Income and Education levels go up. However, it is White, Non-Hispanic Rhode Islanders that have the highest rate of coronary heart disease, while Black, Non-Hispanic Rhode Islanders have the highest rates of heart attacks and strokes.

Heart Disease and Stroke 2011-2014

The rates of heart disease, heart attacks and stroke have all held fairly steady between 2011-2014.

Figure 13: Heart Disease Prevalence Over Time



Behavioral Health Trends– Truven Report Key Findings

The high rates of behavioral health disorders and their human and economic costs require the state to take action in order to impact the long-term health of Rhode Islanders. Children in Rhode Island are at higher risk for developing behavioral health disorders and chronic health conditions than children in other New England states and the nation as a result of exposure to trauma, and the lack of services that enhance protective factors, prevent disorders, promote early identification and provide evidence-based interventions.

Rhode Island spends more of its state budget on direct and indirect behavioral healthcare than most other states. However, state funding for mental health services declined from \$60 million in 2007 to \$38 million in 2014. State funding for substance abuse services dropped from about \$15.5 million to \$5 million.⁶² While Medicaid, Medicare and private Insurance are the main payers for behavioral health services, these sources are paying predominantly for inpatient treatment and medications...high end, high cost services that cannot stand alone as adequate treatment, or in supporting resiliency in children and their families and Recovery from mental health or substance use disorders in adults.

Perhaps most importantly, behavioral health services are disconnected from the rest of healthcare, are focused on treating disorders with little attention to preventing conditions, are limited in scope and availability and reimbursed in a manner that drives the provision of services as opposed to the attainment of results. If Rhode Island is going to impact sustained health improvements for its residents, transforming the behavioral health system to a responsive, comprehensive, integrated system that promotes whole-person health is essential.

Existing Initiatives to Improve Health Priority Areas

Tobacco

RIDOH has an extensive tobacco control plan that sets both short term and long-term initiatives for decreasing tobacco use in the state. The plan consists of four major goals as well as a mass reach communication plan, surveillance and evaluation plan and an infrastructure, administrative and management plan.

⁶² Truven Final Report

Goal 1: RIDOH aims to “**prevent [tobacco use] initiation among youth and young adults**” by decreasing tobacco use among “high school aged youth” to 21% and increasing the number of cities and towns with “strong policies that require local tobacco retail licenses” by March of 2020.

RIDOH has ongoing activities that contribute to these long term goals, including a real time surveillance system of community readiness for tobacco related policy change that tracks cities and towns with proposals regulating tobacco retail licenses, banning flavored tobacco or cracking down on discounts for tobacco products. RIDOH also offers community based trainings in how to conduct surveillance activities in tobacco retail environments. The STARS (Standardized Tobacco Assessment for Retail Settings) program works with local substance abuse councils and youth groups to measure and collect data about tobacco retailers in more than 13 communities. These activities offer useful data about local retailers and also empower community members to think critically about how tobacco is sold and advertised in their neighborhoods.

RIDOH also partners with the statewide advocacy group “Tobacco Free RI” to push for policy changes and community education activities. By 2017, RIDOH aims to “mobilize and train 30 youth leaders to implement the RI Tobacco Free Youth campaign for point-of-sale policy change” as well as “organize 3 large-scale tobacco awareness events... related to nationally-recognized tobacco control days to mobilize network partners and advocates.”

Goal 2: RIDOH also has major initiatives devoted to “**eliminating nonsmokers’ exposure to secondhand smoke.**” By March of 2020, it aims to “reduce the percentage of Rhode Island non-smoker adults exposed to second hand smoke in the home to 5%.” RIDOH does this by advocating for and monitoring the expansion of policies that create tobacco free campuses for schools/universities/colleges, smoke-smoke free multi-unit housing, and tobacco free public places. It is also a priority to establish a tobacco free policy for all state campuses. To better educate stakeholders and decision makers, the department of health offers information sessions about evidence based methods for reducing access to second hand smoke.

Goal 3: RIDOH aims to **promote “quitting among youth and young adults”** by “decreasing the percentage of Rhode Island adults who currently smoke cigarettes to 12%” and “increasing the percentage of Rhode Island adult smokers who make a quit attempt to 80%” by March of 2020. The state already has a well-established Quit Line that provides counseling and support for Rhode Islanders who want to stop smoking. Rhode Islanders might learn about the quit line through direct advertising or they may receive a referral from their doctor.

To expand the reach of the Quit Line, RIDOH hopes to increase its network of providers who use the referral system. Currently, the number of participating doctors is limited. It is possible to embed a Quit Line referral into a provider’s electronic health record system and RIDOH is already working with Lifespan to integrate this method into the hospital system’s electronic medical records. A push to encourage all ACOs, PCMHs and other care collaboratives to follow this approach would greatly expand the link between the clinical care setting and this community resource. A partnership with local dentists could also increase the reach of the Quit Line. RIDOH is currently working on an oral health grant proposal that would expand its Quit Line referral program to 400 dental offices in the state.

To increase the sustainability of the Quit Line and offer expanded services, RIDOH is exploring ways to share the cost of the Quit Line with local health insurance companies. It currently offers

educational presentations to carriers about this possibility, and aims to do more of this work in the coming years.

The Department of Health also pioneered an innovative program called “Text to be an Ex” which used a combination of automated messages and trained tobacco counselors to offer smoking cessation counseling through text messages to young people. The six-month pilot program collected valuable data about the success of this method, but the Department of Health needs a strong partnership with an academic institution to fully analyze its findings and bring the program to scale. RIDOH is developing an academic center for fostering these sorts of collaborations. (See page 95 of the Operational Plan for a fuller description of the RIDOH academic center initiative).

Efforts at smoking cessation also rely on workforce development, especially in settings where smokers are most likely to be receiving other services. Currently, there are only 15 behavioral health professionals in the state that have completed the Certified Tobacco Treatment Specialist training (CTTS). The Department of Health aims to increase this number so more Rhode Islanders with behavioral health needs can also participate in evidence based smoking cessation counseling where they already receive other treatment. The Department of Health is also exploring methods to help community health workers and “health coaches” gain certification in smoking cessation methods so they can offer culturally and linguistically appropriate support in neighborhoods that might be otherwise difficult to reach (see a more detailed description of efforts to grow community health workers and coaches on page 28 of the Operational Plan).

The Department of Health has also begun conversations with Rhode Island’s Medicaid program about how to remove barriers to smoking cessation services. Although cessation services are covered under Medicaid, sometimes recipients do not receive the services they need if the order or types of treatments prescribed by their doctors don’t align with pre-approved treatment plans.

Goal 4: In all of the above initiatives, the Department of Health is committed to **addressing health disparities relates to tobacco use**. Although it is difficult to compile local data that offers a comprehensive picture of tobacco use disparities because existing data sources offer only state-wide prevalence, The Centers for Disease Control and prevention instructs states to prioritize efforts that reach Rhode Islanders who are:

- Adults earning less than \$25,000 a year or 200% of the Federal Poverty Level
- African Americans
- Disabled
- Experience chronic disease(s)

The Department of Health also focuses particular attention on young people who are:

- Lesbian, Gay, Bisexual or Transgender
- Have disabilities
- Native American

Data sources: In most cases, the Rhode Island Department of Health relies on annual results from the Behavioral Risk Factor Surveillance System (BRFSS) to track state level data on self-reported smoking prevalence and exposure to second hand smoke among adults. The Youth Risk Behavior Surveillance System (YRBSS) offers state data on smoking among Rhode Islanders in high school. The Pregnancy Risk Assessment Monitoring System (PRAMS)

measures tobacco use before, during, and after pregnancy among Rhode Island women. An internal surveillance system that relies on a survey of key informant stakeholders tracks changes in state and local policies related to tobacco retailers and reductions in exposure to second hand smoke.

For now, data collected by the Standardized Tobacco Assessment for Retail Settings (STARS) program offers interesting local snapshots of local tobacco retailers but collection methods vary across communities, and don't take place in every city and town, so any data compiled or analyzed isn't reliable enough to offer a comprehensive data set. The Department of Health hopes to grow this resource into a reliable data source in the near future. Evaluation data from the Quit Line and geospatial data are also potential new data sources.⁵ By March of 2017, the Department of Health hopes to develop at least one more population-based survey to "provide state-level estimates for tobacco control indicators." In that same year, it also plans to publish a "comprehensive adult tobacco burden document" with updated state data from 2011-2014.

Behavioral Health Interventions

In addition to RIDOH's above goals, the prevalence of tobacco use by individuals with behavioral health disorders requires targeted interventions. Clinicians should focus on tobacco use as part of their treatment plans. The use of Wellness Recovery Action Plans and Motivational Interviewing are strategies for engaging individuals with behavioral health disorders in tobacco cessation efforts. The integrated health homes (IHHs) will be required to report use of tobacco as one of the performance metrics which qualifies for reimbursement of the withhold incentive payment. Including this measure should facilitate access to tobacco cessation strategies for individuals served by the CMHCs.

Obesity

Rhode Island's Department of Health (RIDOH) draws inspiration from the state's successful tobacco control efforts in its approach to helping Rhode Islanders maintain a healthy weight. In the same way that tobacco control advocates created policies and regulations to increase the cost of cigarettes, make it more difficult to smoke in public and reign in aggressive tobacco marketing, state obesity experts aim to "create environments... that better support healthy decisions."

The state's 2010-2015 action plan calls for obesity prevention strategies in 7 focus areas:⁷

- Built environment
- Childcare
- Communities
- Healthcare and Insurance
- Schools
- Worksites
- Infrastructure

For the **built environment**, RIDOH focuses on both infrastructure improvements and measureable changes in the type of food that is available to local residents. RIDOH works with local communities to make improvements in walkability, safety, access to recreation and access to healthy foods.

In **childcare communities**, RIDOH works to increase the percentage of childcare providers that offer meals and snacks that comply with the “Dietary Guidelines for Americans.”

For **community programs**, RIDOH encourages community based agencies to implement evidence based nutrition and physical activity programs such as “We Can!” and “5-2-1-0.”

In the realm of **healthcare and insurance**, RIDOH advocates for including obesity prevention efforts into routine care. This includes proper screening and identification of obese patients or those at risk of obesity, counseling, referral to healthcare providers such as dietitians or behavioral health providers, and referral to community programs.

In the **school environment**, RIDOH works to enhance the quality and availability of physical education programs, encourages schools to require recess time that meets national requirements, and pushes to guarantee that all foods at school and school events contribute to healthy eating patterns.

In **workplaces**, RIDOH works with employers to implement policy and environmental changes that help their employees increase their physical activity and eat healthy foods. RIDOH also advocates for workplace changes that support breast-feeding mothers.

RIDOH also advocates for a strong **state infrastructure** to support and fund the initiatives in its action plan.

Other obesity partnerships:

RIDOH also partners with a range of contractors and community organizations to encourage healthy eating and more physical activities. The RIDOH Health Equity Zones (described in further on page 95 of the Operational Plan) are key partners in these efforts.

RIDOH is also working with an outside consultant to implement nutrition guidelines for food and vending options at Providence’s Dunkin Donuts Center. The plan improves increasing the availability of healthy options and developing a marketing campaign to encourage spectators to purchase those options.

Barriers to obesity prevention/surveillance

RIDOH’s obesity prevention experts list a number of barriers that make it difficult to move the needle on obesity in the state. Among them is a lack of reliable data about childhood obesity. Currently, RIDOH has no comprehensive source for the Body Mass Index (BMI) of Rhode Island’s children. Data analysts only have access to measures describing a “propensity for obesity” among two to four year olds in the state’s Women Infants Children (WIC) food program. A national survey of children’s health only samples 800-900 Rhode Island children ages 10-17 years old. RIDOH’s Obesity team says pediatricians collect information on their patient’s weight and height (the two measures used to calculate BMI) but that data is not available in the state’s Kidsnet data warehouse.

In general, RIDOH’s obesity team cites a need for better data. Current data sources rely on self-reported accounts of BMI, which are typically inaccurate. Also, sample sizes are too small or lack the geographic specificity to generate usable estimates of disparities.⁹ The team proposed integrating BMI into the Kidsnet data system and linking providers with an obesity referral system to address this issue.

However, there are opportunities for improvement. The Health Information Exchange (HIE), CurrentCare, can collect data on the 44% of the population that is enrolled, but that percentage does not offer an even distribution of the population. As the HIE increases enrollment, it will be able to provide useful data about BMI. The Health Information Exchange does not yet have the ability to do aggregate analysis of clinical results, such as BMI, but that ability should be available before the end of 2016, at which point the RIDOH can use for surveillance.

Rhode Island Kids Count is also in the process of developing data strategies for collecting BMI for all Rhode Island Children. The non-profit recently released a report assessing a range of approaches for gathering this important resource.

The obesity team says in general, childhood obesity is extremely undiagnosed, perhaps in part because pediatricians lack referral options once they identify a patient who needs help managing their weight.

The RIDOH obesity team also points to Rhode Island's physical education standards as an area for improvement. Current state wide policies demand the presence of physical education, but those standards are weak and interpretation of the policies vary by school district. In some cases, health classes can stand in for courses that actually force students to move their bodies. RIDOH has raised the possibility of partnering with the Rhode Island Department of Education (RIDE) to create a full time position devoted to working on physical activity in schools.

The obesity team also noted that many Rhode Islanders who struggle to maintain a healthy weight are trying to manage an undercurrent of mental distress.

A report from the Canadian Obesity Network indicates that people with mental health issues have a two- to three-times higher risk of obesity, and people with obesity have a 30% higher risk of mental health issues. Also, for someone with a diagnosis of major mental illness, the risk of dying from an obesity-related illness can increase by up to 38%, which means that life expectancy declines by 15 to 20 years.⁶³ According to the report, individuals with depression have higher levels of cortisol; in people with obesity, fat tissue is linked to producing higher levels of cortisol. The connection between a chemical introduced by fat tissue that, in high amounts, is linked to depression has significant implications for integrated physical/behavioral health treatment. There is also a link between some medications used to treat mental illness and increased risk of weight gain.⁶⁴

Diabetes/Heart Disease/Stroke (Text TBD)

Initiatives to Improve Behavioral Health

Health Homes

CMS has approved three Health Home State Plan Amendments (SPAs) in Rhode Island that provide behavioral health services to target populations. [The first SPA](#) (approved 11/23/11, effective 10/1/11) focuses on children and youth with special health care needs served by [CEDARR Family Centers](#); the [second SPA](#) (approved 11/23/11, effective 10/1/11) focuses on adults with severe mental illness served by Community Mental Health Organizations. The [third](#)

⁶³ <http://www.obesitynetwork.ca/Obesity-and-Mental-Illness-Addressing-a-Double-Epidemic-322>

⁶⁴

[SPA](#) (approved 11/6/13, effective 7/1/13) created health homes for Medicaid enrollees with opioid substance use disorder undergoing or qualifying for medication assisted treatment.⁶⁵

CEDARR Health Homes for Children and Families

CEDARR Family Centers are available statewide and designed to provide a structured system for facilitating the assessment of need for, and the provision of high quality, evidenced based Medically Necessary services that may be available for children pursuant to federal Early and Periodic Screening, Diagnosis and Treatment (EPSDT) requirements, as well as referrals to community based services and supports that benefit the child and family.

CEDARR Family Center Health Homes operate as a “Designated Provider” of Health Home Services. All CEDARR Family Centers employ independently licensed health care professional such as; Psychologists, Licensed Independent Clinical Social Workers, Masters Level Registered Nurses, or Licensed Marriage and Family Therapists; CEDARR Family centers also employ staff trained to provide care coordination, individual and family support and other functions expected from a health home. The CHH Team minimally consists of a Licensed Clinician and a Family Service Coordinator, responsible for consulting, coordinating and collaborating on a regular basis with a child’s Primary Care Physician/Medical Home and with other providers providing treatment services to that child. Medical Specialists and other Medical professionals are included on the CHH Team based on the unique needs of each enrolled child. CEDARR Family Centers are required to provide all services in a patient and family centered manner.

The CEDARR Health Homes Team is responsible for providing assistance to the family in accessing and coordinating services. These services include the full range of services that impact on Children with Special Health Care Needs and include, but are not limited to, health, behavioral health, education, substance abuse, juvenile justice and social and family support services. The Team integrates the full range of services into a comprehensive program of care. At the family’s request, the CEDARR Team can play the principal role as organizer, information source, guide, advocate, and facilitator for the family by helping the family to assess strengths and needs, identify treatment goals and services, and navigate agency and system boundaries.

Referral to Community and Social Support Services are provided by members of the CEDARR Health Homes Team and include information about formal and informal resources beyond the scope of services covered by Medicaid, such as those which may be available from other parents, family members, community-based organizations, service providers, grants, social programs, funding options, school-based services, faith-based organizations, etc. Whenever possible, the expectation is that families are informed of opportunities and supports that are closest to home, that are the least restrictive and that promote integration in the home and community. Members of the CEDARR Health Homes Team emphasize the use of informal, natural community supports as a primary strategy to assist children and families.

Medicaid recipients who meet the following criteria are eligible for CEDARR Health Home services:

- Has a severe mental illness, or severe emotional disturbance
- Has two or more chronic conditions as listed below:
- Mental Health Condition
- Asthma
- Diabetes
- Developmental Disabilities

⁶⁵ <http://www.nashp.org/rhode-island-154/>

- Down Syndrome
- Mental Retardation
- Seizure Disorders
- Has one chronic condition listed above and is at risk of developing a second

Integrated Behavioral Health Patient Centered Medical Home Pilot

The Care Transformation Collaborative of RI (CTC) is a multi-payer, advanced primary care (APC) initiative that is co-convened by OHIC and EOHHS and focused on transforming primary care practices into Patient Centered Medical Homes (PMCHs). Operating since 2008, CTC now represents 73 practice sites, with 400+ primary care providers providing care to over 300,000 Rhode Islanders.⁶⁶ A 2015 CTC strategic priority was to develop, implement and evaluate a sustainable integrated behavioral health (IBH) model serving adult patients within APC settings. To facilitate this work, CTC established an IBH workgroup which included representatives from health plans, APC practices, state agencies and behavioral health (BH) providers. The workgroup developed a clinical and financial IBH proposal to pilot the proposed model with up to 20 PCMH practices.

The CTC proposed IBH business model aims to: 1) increase the identification of patients with BH and substance use disorder (SUD) through universal screening for depression, anxiety and SUD, 2) increase access to brief intervention for patients with moderate depression, anxiety, SUD and co-occurring chronic conditions, 3) improve care coordination for patients with severe mental illness and SUD, 4) provide care coordination and intervention for patients with high emergency department (ED) utilization, 4) test the proposed financial model for long term sustainability with particular attention to ED and inpatient (IP) utilization/total cost of care as sustainability measures.

CTC seeks to establish a pilot (10 practices in Years 1-2 and 10 practices in Years 2-3) with a phased start up and performance year implementation schedule. Practices would be expected to participate in monthly on-site IBH consultation services (coaching for leadership engagement, work flow development for implementation of screening tools and team based care, creation and utilization of behavioral health population registry, and use of rapid cycle quality improvement strategies). An evaluation based on the logic model is incorporated at project onset and takes into account patient identification, interventions and outcome measures. Both phases will address the following goals:

- Increase patient access to BH services within PCP settings
- Increase patient identification and treatment of mild-moderate BH conditions within the APC setting
- Reduce patients' risk and cost
- Increase staff competence with providing IBH services.

During the start-up phase practices will be expected to:

- Complete Maine Health Access Evaluation tool (an evidence-based tool to measure integration)
- Expand onsite BH presence within APC with staffing plan based on the number of patients (1 FTE provider per 5,000 attributed lives)

⁶⁶ <https://www.ctc-ri.org/>

- Provide universal screening for depression, anxiety, substance use using evidence based tools
- Develop workflows for automatic referral to BH clinicians for patients who screen positive for moderate BH needs
- Develop referral compacts and follow up coordination expectations for patients with severe BH needs based on assessments
- Perform care coordination conferencing between medical and BH providers on patients identified as high risk or with chronic health conditions and BH needs
- Create the start of a population health registry for patients with moderate and high risk scores.

Practices will advance to the performance year phase once they have achieved a score of 5 on the Maine Health Access Evaluation tool. Practices will be expected to:

- Continue to perform startup components
- Monitor/ improve patients' treatment response through care coordination review of patient registry scores for depression, anxiety and substance use and chronic care quality measures
- Implement population health review for patients with high ED usage and BH needs and implement IBH strategies: e.g. co-led IBH group visits targeting specific chronic diseases such as diabetes with prevalent BH comorbidity such as depression.

In February, 2016, a pilot site, CharterCARE, opened a new Integrated Behavioral Health Center in Providence. The Center is staffed by a multi-disciplinary treatment team including physicians, nurses, and therapists, and led by certified Suboxone physicians. The program offers same day appointments for outpatient evaluation/intake for co-occurring disorders and/or comorbid behavioral health and medical conditions, short and long term counseling, individual counseling, Suboxone treatment from induction phase to maintenance, a Partial Hospital Program and an Intensive Outpatient Program. CharterCARE reports working closely with the state of Rhode Island to become a center of excellence in Suboxone outpatient treatment.

Integrated Health Homes

Implemented in January 2016, Rhode Island Integrated Health Homes (IHH) for persons with serious and persistent mental illness are responsible for coordinating and ensuring the delivery of person-centered care; providing timely post discharge follow-up, and improving client health outcomes by addressing primary medical, specialist and behavioral health care through direct provision, or through contractual or collaborative arrangements with appropriate service providers of comprehensive, integrated services.

IHHs are part of the Medicaid Re-design approach which provides a tiered service approach based on an individual's condition and level of need: a traditional IHH team for individuals with a serious mental illness, an Assertive Community Treatment Team for individuals with a serious mental illness that experience significant functional impairment and a Medication Assisted Therapy HH team for individuals with a serious opiate use disorder. Emphasis is placed on the monitoring of chronic conditions, and preventive and education services focused on self care, wellness and recovery. Clients' medical and behavioral benefits are administered by the same managed care organizations, intended to facilitate clinical integration across the continuum of care in order to achieve substantial clinical improvement. IHH programs are accountable for impacting preventable hospital admissions/readmissions and avoidable

emergency room visits, thereby reducing health care costs. Participating CMHCs receive a per member per month (PMPM) payment for providing enhanced health home services for members. IHHs are an important step forward in transforming the CMHCs' role in promoting population health.

CMHCs have been most challenged by two elements of the model. First, Centers have had to modify existing, or purchase new, data systems to meet requirements for data collection and reporting, billing and information exchange for patient care. Second, there is a proposed ten percent payment withhold which CMHCs can earn as incentive payments after achieving performance targets. Withholding funding from the Centers, which have lost more than \$30 M in state revenue in recent years, could impede their ability to invest in service and administrative improvements necessary to elevate their delivery of care. Performance-based payment is the right strategy, however, it may be more effective to fully fund the Centers for the first year to establish the necessary service array and infrastructure before tying withheld payment to performance.

Transition Age Youth Mental Health, Substance Use Disorder Planning and Cooperative Agreement to Benefit Homeless Individuals Grants

Rhode Island is in various stages of implementation of a number of federal grants intended to impact behavioral health morbidities among target populations. Each of the grants is intended to develop cross-agency strategies in order to better address the needs of target populations.

“Healthy Transitions RI” is targeted to serve youth and young adults ages 16-25 with Serious Emotional Disturbance (SED), Severe Mental Illness (SMI) and/or Co-Occurring Disorders (COD) in two Rhode Island communities. The purpose of the grant is to bridge the division of responsibility for these young people between state agencies, service providers, families and others by developing a shared “locus of responsibility” for their successful care. The project involves administrative innovation through an interdepartmental Transition Team, advised by a Statewide Advisory Council composed of young adults, families, advocacy groups, state departments and service providers; and community collaboration within Warwick and Woonsocket, building on existing partnerships between youth and family representatives, local service provider agencies, educational, recreational, church and other community stakeholders. Each community has built a local advisory structure to guide the local development of the project, make the communities aware of the needs of their youth/young adults, collaborate to help identify, engage and screen those at risk for developing, SMI and/or COD and, through the cities' two Community Mental Health Centers, provide specialized intensive services to those who are experiencing SMI/COD. These services will involve a number of Evidence Based Practices delivered within the Coordinated Specialty Care (CSC) model.

The Rhode Island Youth Treatment Planning project is targeted to serve youth ages 12-25 with substance use disorders and/or co-occurring substance use disorders and mental health conditions by creating a unified, recovery focused service approach. The current mental health and substance use disorder “systems” for children/adolescents and adults are fragmented and operate in siloes. The Children's Cabinet serves as the interagency council overseeing this grant, which will be key to addressing gaps and barriers in the systems at the highest level of State Government; and to developing policies (from programmatic reform to health insurance parity), fiscal supports, and the workforce capacity necessary to carry out the goals and objectives. The strategies are intended to support the State departments in leveraging collective resources, ensuring that individuals served and their families have meaningful input into the

development of policies and practice and facilitating exploration of a necessary and appropriate statutory response.

The Rhode Island Coalition for the Homeless has been able to decrease the overall numbers of homelessness by targeting available affordable housing units for veterans, persons experiencing chronic homelessness and families being diverted from the shelter system. Through a recently awarded **Cooperative Agreement to Benefit Homeless Individuals (CABHI) grant**, RI is looking to expand this success via a statewide effort to serve veterans and other persons experiencing chronic homelessness with substance use disorders, serious mental illness, or co-occurring mental health and substance use disorders. The project will also serve persons who may experience chronic homelessness upon release from the State’s Prison Intake Center.

In addition to these many existing initiatives to address the Integrated Population Health Plan priority areas several reports have been issued about these specific health issues. Summaries of a selection of four state reports on SIM health priority areas are given in Table 7 below.

Table 7: Rhode Island Reports on Specific Health Topic Areas

Name of Report	Publishing Entity	Year	Summary
Rhode Island’s Strategic Plan on Addiction and Overdose ¹⁹	Rhode Island Governor’s Overdose Prevention and Intervention Task Force	2015	The goal of the plan is to reduce opioid overdose deaths by one-third within three years. The Strategic Plan has four key strategies aimed at treatment, overdose rescue, prevention, and recovery.
Rhode Island State Plan on Diabetes ²⁰	Rhode Island Diabetes Prevention and Control Program, RI Department of Health	2010	The purpose is to help diabetes stakeholders in Rhode Island provide a coordinated approach to the goal of reducing the burden of diabetes in the state over the next five years, with a particular focus on reducing disparities related to diabetes
The Burden of Overweight and Obesity in Rhode Island ²¹	Initiative for a Healthy Weight, RI Department of Health	2011	This report illustrates the impact of overweight and obesity in Rhode Island including risk factors, trends, disparities, and comparisons between the state and the rest of the country. This report will support the efforts of the IHW program and its partners to develop and implement evidence-based programs, policies, and projects that will decrease obesity and related chronic diseases.
Adult Tobacco Use in Rhode Island ²²	Division of Community, Family Health, and Equity, RIDOH	2013	The purpose of this report is twofold: (1) to share population-based data on adult tobacco use in Rhode Island, and (2) to describe the Tobacco Control Program’s investment in reducing the burden of tobacco use with tobacco control stakeholders across the state.

Description of RIDOH HEZ Activities and How They Relate to Priority Areas

Health Equity Zones are contiguous geographic areas that have measurable and documented health disparities, poor health outcomes, and identifiable social and environmental conditions to be improved. Health Equity Zones (HEZs) are designed to achieve health equity by eliminating health disparities using place-based strategies to promote healthy communities. The 11 HEZ Collaboratives are funded with State and Federal dollars in partnership with RIDOH. The HEZs support innovative approaches to prevent chronic diseases, improve birth outcomes, and improve the social and environmental conditions of neighborhoods across five counties statewide.

Each Health Equity Zone (HEZ) Collaborative work plan will be implemented over a three or four year period starting in 2015. All HEZ Collaboratives conducted community needs assessments in Year one. Health Equity Zone work plans, written from the needs assessment findings in year one, focus on the communities that each Health Equity Zone serves. Work Plans will be implemented moving forward into year 2. The work plans:

- Use community-based and evidence-based strategies and programs
- Focus on maternal child health/chronic disease/health promotion
- Address health inequities and inequalities

The HEZ Collaborative is built on meaningful and true engagement of multi-sector key stakeholders working together, and include municipal leaders, residents, businesses, transportation, faith leaders, community planners and partners, law enforcement, education systems and health systems, among others. These Collaboratives look at the factors that drive poor health outcomes, and engage in action plans based on strategies that have been shown to be successful.

The HEZ Collaboratives are in the process of completing their annual reports for year one of their work plan. Once RIDOH receives those reports (expected in late April) this plan will offer a more detailed description of their work and how it relates to achieving health equity for all and building stronger and healthier communities across the state.

Promising Interventions to be Brought to Scale

Professionalizing Community Health Workers

Community Health Workers are frontline public health workers who serve as a liaison between health/social services and the community to facilitate access to services and improve the quality and cultural responsiveness of service delivery. Typically, community health workers are non-licensed, gain expertise from life experience and some community / health education. This lack

of health professional licensing makes it difficult for Community Health Workers to receive reimbursement for the valuable role they play in improving the health of their community and working with a health team.

The Home Asthma Response Program (HARP) offers an example of the potential power of Community Health Workers. RIDOH partnered with St. Joseph's Hospital and Hasbro Children's Hospital Community Asthma program to offer home based asthma education and interventions for families who couldn't attend existing clinics or classes. Families of children who had recently gone to the emergency department for asthma related health issues received three visits- one with a certified asthma educator and a community health worker for an initial assessment and asthma trigger reduction plan and two with just the community health worker who offered follow up support.

In year two of the project, asthma related costs from the 41 cases with claims that could be analyzed dropped by 53.4% for all project participants and 80% for high utilizers. The claims also show a 92% reduction in asthma related hospital and emergency department costs. Although this intervention is not directly related to the population health plan's health focus areas, the model could be replicated for any team-based approach to tobacco use, diabetes, heart disease, stroke, or even some behavioral health interventions.

RIDOH is well-underway in developing a community health worker (CHW) certification process to strengthen and grow this important workforce. In addition to certification, there are several CHW infrastructure building project in the planning stage that involves a partnership with Rhode Island College to offer the CHW core competency training, supporting CHW employers and provide additional opportunities for specialization in focus areas such as behavioral health.

Chronic Conditions Integrated Work Force System

RIDOH has created a coordinated system to provide evidence based and best practice education to activate patients and improve patient skills necessary to self-manage their chronic condition(s). This system is comprised of the Community Health Network which is a partnership between multiple evidence-based programs based at RIDOH and within organizations outside of RIDOH that work on chronic disease management. The Community Health Network is building a skilled workforce of expertly trained staff both professional and community health workers who provide disease/self-management programs, chronic disease management programs, and patient navigation.

The Community Health Network (CHN) supports Rhode Island's health care movement towards integrated health care and patient centered medical homes. The 2011 Patient Centered Medical Home NCQA standards require patient self-care support and access to community resources. The CHN workforce provides a resource to providers, patients and payers which links to the practice team and leads to productive interactions between the patient and the practice team.

Components of the system include a centralized referral system with secure fax and email to RIDOH; follow up with the patient to assist with access to the CHN resources, and communication back to the practice concerning the patient experience. Evidence Based Programs include:

- Certified Diabetes Outpatient Educators (CDOE)
- Cardiovascular Disease Outpatient Educators (CVDOE)

- Chronic disease self-management
- Diabetes self-management
- Enhancefitness
- LIVESTRONG RI
- Quitworks
- Chronic Pain Self -Management)
- Peer Resource Specialists / Peer Navigators
- A Matter of Balance: Managing Concerns About Falls
- Certified Asthma Educators (AE-C)
- Arthritis Foundation Walk with Ease
- Arthritis Foundation Exercise Program
- YMCA's Diabetes Prevention Program
- The Home Asthma Response Program (HARP)
- National Diabetes Prevention Program

Existing Behavioral Health Interventions

There are numerous examples of behavioral health best practices and innovations occurring in Rhode Island; the key to behavioral health system transformation is to bring them to scale. Examples of initiatives and programs that are being provided in limited parts of Rhode Island that merit consideration for expansion include the following:

- Recognizing the need for increased social supports and services for young families, Lifespan Community Health Services helps support a Spanish parenting workshop. "Temas Familiares," which reached nearly 350 people in 2012, offers sessions on important issues related to physical and mental health such as autism, depression, drug-use, childhood development, and emotional intelligence.
- Women and Infants Hospital's initiative to address postpartum depression in new mothers
- Evidence-based home visiting practices (e.g., Healthy Families America, Nurse-Family Partnership, and Parents as Teachers; First Connections; Positive Parenting Program; Common Sense Parenting) are federally funded and predominantly serving the 4 Core Cities
- Children's Intensive Services are only available in Pawtucket, Barrington and Warwick
- South County Hospital's Mental Health First Aid Initiative is providing training and education to stakeholders and touch points throughout the community in order to reduce stigma, increase opportunities for early identification of mental health disorders and establishing pathways for addressing disorders when they are identified.
- Bradley Hospitals Patient Centered Medical Home for Children with Autism
- Thundermist's "Trans" Health Access Team
- CharterCARE has opened a new Integrated Behavioral Health Center in Providence. The Center is staffed by a multi-disciplinary treatment team including physicians, nurses, and therapists, and led by certified Suboxone physicians. The program offers same day appointments for outpatient evaluation/intake for co-occurring disorders and/or co-morbid behavioral health and medical conditions, short and long term counseling, individual counseling, Suboxone treatment from induction phase to maintenance, a Partial Hospital Program and an Intensive Outpatient Program. CharterCARE reports working closely with the state of Rhode Island to become a center of excellence in Suboxone outpatient treatment.

- The ANCHOR Emergency Department Recovery Program, with 83% of Recovery Coaches consultation resulting in confirmed linkage to substance use disorder treatment within 48 hours
- Naloxone training for all West Warwick police officers and for the public was one of the first initiatives carried out by the Thundermist HEZ, resulting in saved lives and more residents gaining access to resources for recovery.
- The Women's Resource Center is supporting a mural arts program as part of a strategy to increase social interaction, intended to improve the physical and mental health of children and their families based on research which suggests that increased community connectedness is correlated with decreases in violence, substance abuse, obesity, and myriad other social problems.

Description/assessment of state infrastructure / capacity to support those existing initiatives

To be filled in: Population health writers will work with staff to pull from operational plan and then add specific budget details for health focus areas.

Goals, Objectives and Interventions/Policies/System Changes to Improve Health Outcomes for Each Priority Area

For April 30 draft, The Integrated Population Health Plan refers to interventions funded by SIM. Those activities are outlined in Table 9: SIM Component Summary Table.

Table 9: SIM Component Summary Table

SIM Component Summary Table	
Component & Activity/Budget Item:	Description of activities
Planning and Governance	
Steering Committee	The SIM Steering Committee is the public/private governing body for Rhode Island's SIM project. The committee's primary function is to set strategic direction, create policy goals, approve the funding plan, and provide oversight over the implementation of the SIM grant. The committee meets monthly and is comprised of community stakeholders who represent health care providers/systems, commercial payers/purchasers, state hospital and medical associations, community-based and long term support providers, and consumer advocacy organizations.
SIM Project Director and Staffing Across Five Partner Agencies	Staff at each participating state agency will carry out day to day functions of the SIM project. Participating state agencies are: Executive Office of Health and Human Services (EOHHS), Office of the Health Insurance Commissioner (OHIC), Department of Behavioral Health, Developmental Disabilities, and Hospitals (BHDDH), Department of Health (RIDOH), and HealthSource RI. We also work closely with the Department of Children, Youth, and Families, but they do not have a dedicated SIM staff person.
Project Management Vendor	The Project Management Vendor (UMASS) manages SIM related project management activities including support for stakeholder management, project meetings, data collection, risk management, communications, sub-contractor management, and work plan management.
Investing in Rhode Island's Healthcare Workforce and Practice Transformation	
Community Health Teams	Community health teams (CHTs) currently serve as extensions of primary care, helping patients meet unaddressed social, behavioral, and environmental needs that are having an impact on their physical health. Overall, CHTs improve population health by addressing social, behavioral, and environmental needs. Our SIM-funded teams will also support providers in transitioning to value-based systems of care; and help transform primary care in a way that increases quality of care, improves coordination of care, and reduces/controls related costs and expenditures. In order to maximize improvements in Rhode Island's population health, address and improve our social and environmental determinants of health, and make progress in eliminating health disparities within our state, CHTs services should be available to all Rhode Islanders who need that level of multi-disciplinary, community-based services to address the factors that impact our health. In particular, SIM will fund two areas of work for CHTs in Rhode Island: Building the capacity of current teams to serve their patients more effectively, and supporting up to two new CHTs. The new CHTs will be multi-disciplinary (including behavioral health providers and community health workers); connected to a provider within a certain geography; accessible to all regardless of insurance; and reflective of the diversity of the communities they serve.

SIM Component Summary Table

Component & Activity/Budget Item:	Description of activities
Child Psychiatry Access Program	The Pediatric Psychiatry Referral Consultation project will establish a children's mental health consultation team to support pediatricians and other primary care doctors serving children and adolescents with mental health conditions. The Access Program is designed to assist the pediatricians and other physicians to treat children with behavioral and mental health needs in a way that is preventive and responsive to a patient's immediate circumstances. This consultation, support and response to emergent situations will be invaluable for families. This project will also provide ongoing physician training to ensure that the delivery of care for children and adolescents can be in the least restrictive setting possible.
PCMH Kids	PCMH-Kids builds off of the successes of Care Transformation Collaborative in Rhode Island (CTC-RI), the adult patient-entered medical home (PCHM) initiative in Rhode Island. PCMH-Kids is extending the transformation of primary care practices in Rhode Island to children by engaging engage providers, payers, patients, parents, purchasers, and policy makers to develop high quality family/youth/children-focused PCMHs that will assure optimal health and development. PCMH-Kids is convened by the state's Executive Office of Health and Human Services (EOHHS) and Rhode Island Medicaid program, with participation from all four major health plans in Rhode Island. Nine pilot practices have created a common contract with payers and are receiving supplemental payments and on-site, distance, and collaborative learning and coaching to support practice transformation and quality improvement. SIM funding for PCMH-Kids will include support for practice facilitation and coaching, practice assistance with reporting and analyzing data, and overall program evaluation.
Behavioral Health Transformation: <i>Integrated Behavioral Health</i>	The Rhode Island SIM Test Grant will fund a qualified provider with experience and skill in helping primary care practices, representing multiple payers, to integrate behavioral health care into their clinical work. The qualified provider will have expertise facilitating within primary care practices: 1) depression, anxiety and substance use screening; 2) collaboration of behavioral health specialty staff with nursing/physician personnel; 3) use of behavioral health subject-matter expert(s) to support training and development efforts; and 4) development of knowledge about appropriate measurement and quality assurance activities.
Behavioral Health Transformation: <i>SBIRT</i>	Rhode Island seeks to decrease the use of tobacco, alcohol and other drugs. The Rhode Island Department of Behavioral Health, Developmental Disabilities and Hospitals (BHDDH) has applied for a Collaborative Agreement for Screening, Brief Intervention and Referral to Treatment (SBIRT) grant from the Substance Abuse and Mental Health Service Administration (SAMHSA). If funded, this grant will offer, over a five years, alcohol, drug and tobacco screening to 250,000 adults. As needed, referrals will be made to brief interventions or treatment. Priority populations are individuals living in designated high need areas and persons leaving Department of Corrections' facilities. If the grant is funded, SIM Test Grant funds will support ongoing training to a 24 person workforce of Health Educators and Navigators. If the grant is not funded, SIM will still fund training programs for existing SBIRT providers throughout the state.
Behavioral Health Transformation: <i>Provider Coaching</i>	Another behavioral health investment will be provider coaching. Rhode Island's publicly funded Community Mental Health Centers (CMHCs) are "health homes" for persons with serious mental illnesses. SIM Test Grant funds will be used to support an expert coaching program to help CMHCs improve their effectiveness in addressing consumers' health care needs. Expert coaches will help CMHC staff: 1) improve clinical practices, such as connecting more effectively with primary care providers; 2) learn health information technology uses and benefits; 3) collect and measure data; and 4) strengthen quality improvement practices.
Behavioral Health Transformation: <i>Care Management Dashboard</i>	The SIM Test Grant will fund a real-time communication system between Rhode Island hospital providers and CMHCs, mutually responsible for the care of approximately 8500 publicly insured individuals with serious mental illness. An electronic dashboard will deliver real-time information to the CMHCs when their consumers have a hospital emergency department or inpatient encounter. This effort will support targeted, clinical interventions, improve care coordination and reduce re-admissions. Ongoing funding for operation of the dashboard will come through a PMPM cost to the CMHCs. In addition to development of the dashboard, SIM Test Grant funds will cover training to providers in use of this new technology.

SIM Component Summary Table

Component & Activity/Budget Item:	Description of activities
Integrated Population Health Plan	<p>Rhode Island aims to achieve measurable improvement in the health and productivity of all Rhode Islanders. To achieve this aim, the healthcare delivery, public health, community development, and social service sectors as well as the many academic, public, and private institutions in our state will work together to ensure that all Rhode Islanders are able to achieve their highest health potential, without system/structural barriers. This population health improvement effort requires multi-sector/multi-agency collaborations to help us transition from an uncoordinated, healthcare provider and payer-centric care focused health services environment to an environment where public health, social service, and healthcare delivery systems are well-integrated as well as outcomes-oriented and person-centric.</p> <p>Although the Integrated Population Health Plan focuses on specific physical and behavioral health conditions or diseases, our aim is to create an approach that centers on wellness, not disease. As the plan evolves, our strategies will move towards methods that help Rhode Islanders live long, productive and healthy lives, addressing them not as patients but as people.</p> <p>Our approach to population health improvement focuses on health across the life course (from birth to death) from the perspective of the "whole-person" and includes behavioral health, where behavioral health includes mental health and substance use disorders. It is a population health vision, with the goals of improving the health and wellbeing of all Rhode Islanders; to promote "any door as the right door" to identifying mental illness and substance use disorders early and providing the supports and interventions to enable people to recover rapidly; to create healthy, resilient inclusive communities throughout Rhode Island, and to ensure that persons with physical or behavioral health conditions, including severe and persistent mental illness and/or addictive disease, have access to evidence-based services that support recovery and full inclusion in their communities in the least restrictive setting possible.</p>
Healthcare Quality, Reporting, Measurement and Technology Feedback	<p>Based on significant stakeholder input, SIM will fund the development of a statewide quality reporting system to help providers "enter data once and analyze many time." Our goals for the reporting system are to improve the quality of care for patients and driving improvement in provider practices by giving feedback to providers, provider organizations, and hospitals about their performance based on quality measures; produce more valuable and accurate quality measurements based on complete data from the entire care continuum; leverage centralized analytic expertise to provide valuable and actionable reports for providers and to drive improvements in population health; reduce the duplicate reporting burden upon providers and provider organizations by having a common platform for reporting; publically report quality measurements in order to provide transparency and support patient engagement in making informed healthcare decisions; and use existing databases, resources and/or systems that meet our needs, rather than building from scratch.</p>
Patient Engagement	
Patient Engagement	<p>In order to ensure that patients receive the greatest value from payment reform changes, and that they are maximally engaged in positive health behaviors including self-advocacy, SIM will invest funds to provide patients access to tools that increase their involvement in their own care, including creating the infrastructure to allow patients to more easily share their advanced care directives and healthcare proxies with their providers; developing patient engagement tools such as health risk assessments; and implementing tools that measure consumer satisfaction as well as behavior change readiness.</p>
End-of-Life/Advanced Illness Care Initiative	<p>We know that patients and providers both avoid discussions about end-of-life planning, leading to unwanted medical care and family distress. SIM will fund Advance Care Planning Discussion trainings, to support providers in carrying out patient engagement activities in the event of advanced illness. The program will promote effective collaboration between patients, families, and providers in making healthcare decisions; improve health literacy among patients and their families; and provide opportunities for participants to complete advance directives.</p>

SIM Component Summary Table

Component & Activity/Budget Item:	Description of activities
Increasing Data Capability and Expertise	
HealthFacts RI	<p>The Rhode Island SIM Test Grant is investing funds to support the implementation and maintenance of the All-Payer Claims Database (APCD), named "HealthFacts RI." HealthFacts RI collects, organizes, and analyzes health care data from nearly all major insurers who cover at least 3,000 individuals in Rhode Island. This information allows users to benchmark and track Rhode Island's health care system in ways that were previously not possible. When fully implemented, HealthFacts RI will ensure transparency of information about the quality, cost, efficiency, and access of Rhode Island's healthcare delivery system. It will also provide state agencies and policy makers with the information needed to improve the value of healthcare for Rhode Island residents and will illuminate how Rhode Islanders use the healthcare system, the effectiveness of policy interventions, and the health of our communities.</p>
Statewide Common Provider Directory	<p>Payers, providers, and consumers all need access to accurate provider information. Using SIM funds, Rhode Island has contracted with its state designated entity for HIE to build a Statewide Common Provider Directory. The provider directory is a database with a web-based tool that allows a staff team to maintain the file consumption and data survivorship rules, error check flagged inconsistencies or mapping questions, and manually update provider data or enter new providers. It will consist of detailed provider demographics as well as detailed organization hierarchy. This organization hierarchy is unique and essential to being able to maintain not only provider demographic and contact information, but their relationships to practices, hospitals, ACOs, and health plans.</p>
Integrated Health and Human Services Data Ecosystem	<p>Rhode Island lacks a modern system for integrating person-level information across our agencies and then turning that holistic information into action. While EOHHS has built a data warehouse that stores many different sources of data – in addition to separate data sets that live within each agency – there is limited capacity to first connect and then share those linked data, either at the person level or in the aggregate. If we are able to combine and better analyze these data, we can obtain critical information about the needs of our population, the effectiveness of our programs, and how to responsibly spend valuable public resources.</p> <p>With funding from SIM, Rhode Island will take informed, project-based steps that reflect iterative learning and sophistication to build our new data ecosystem, integrating data across our agencies and driving policy with those data. This approach differs from a traditional, expensive and "all at once" Data Warehouse project that is common to many data integration initiatives. Rather than seek to purchase or build a large system that will attempt to integrate all data and develop user interfaces that satisfy many user needs – a process that could take years, come with high upfront costs, and that would rely on our existing knowledge to guide design and decision making – Rhode Island is planning a lighter, simpler and more adaptive solution.</p>
Regulatory Levers	
Measure Alignment	<p>Quality measurement and improvement are integral components of value-based contracting. As value-based payment arrangements become more widely used in Rhode Island, it is important to ensure consistency and coherence in quality measures, to ease administrative burden on providers, and drive clinical focus to key population health priorities. Toward this end, between June 2015 and March 2016, the Measure Alignment Workgroup created by the SIM Steering Committee created an aligned measure set with 59 measures. Included within the menu were core measure sets for ACOs (11 measures), primary care providers (7 measures), and hospitals (6 measures). See appendices for additional information and measure specifics. The workgroup was made up of up payers, providers, measurement experts, consumer advocates, and other community partners. The next step is for OHIC to create the implementation process for the measures and for the workgroup to create a governance process for annual review and updating of the set.</p>

SIM Component Summary Table	
Component & Activity/Budget Item:	Description of activities
Other Regulatory Levers	Rhode Island is committed to using our multiple regulatory and purchasing levers to advance the policies described in the healthcare delivery system transformation plan above. All of the state agencies that comprise the interagency team are engaged in this work, identifying the regulatory abilities they have now to move the payment system, support providers and patients, and thus improve population health and address costs. For example, OHIC's Affordability Standards described within the Operational Plan on page 97 hold insurance carriers to specific standards to advance value-based purchasing; promote practice transformation and increase financial resources to primary care for population health management; and around hospital contracting.
Evaluation	
Evaluation	SIM will retain professional outside evaluators to carry out part of our evaluation process, but we will be monitoring and evaluating the milestones and metrics we identify in-house as well. The Steering Committee has also approved a learning collaborative process to study the efficacy of value-based payments to increase quality, improve population health, and lower costs. Our learning collaborative work can be more long-term and aspirational. And our professional evaluation can cover those topics where we do not have the expertise or tools to carry out a particular type of evaluation well.

Later drafts will propose new interventions and ways to creating linkages within existing interventions and/or bring them to scale. Below text offers background on our approach moving forward/ potential intervention focus areas for the future:

Multi-sector/Multi-agency approach

We will implement a multi-sector/multi-agency approach to population health improvement. To begin the process of establishing meaningful connections with entities outside of the traditional public health and healthcare delivery systems, the strategic goals and current initiatives of state departments were assessed to identify areas of common focus and opportunities for linkage with population health planning.

Kindig and Isham propose a “community health business model” for approaching the task of addressing social determinants of health in the context of population health planning that acknowledges the need for cross-sector buy in and accountability²³. The model identifies several elements for successful implementation and sustainability of population health improvements, including stakeholder engagement, transparency, a clear leadership structure, common purpose, identified resources, collective and evidence-based interventions, clear economic incentives, ongoing evaluation, and adaptive strategy.

Building a community health business model in Rhode Island will require the commitment and cohesive policy making of a wide range of state government actors. To begin the process of establishing meaningful connections with entities outside of the traditional healthcare delivery system, the population health team assessed the strategic goals and current initiatives of state departments to identify areas of common focus and opportunities for linkage with population health planning.

Rhode Island Department of Education (RIDE)

Rhode Island's Strategic Plan for Education 2015-2020 includes a goal of increasing early childhood developmental screening rates for children aged 3-5 by 15%. This will be achieved in part through promotion of the use of high-quality health and educational screening of young children and the distribution of family-friendly information about early childhood development. There is a clear opportunity for partnership between the healthcare delivery system and department of education; healthcare providers and schools can collaborate to establish protocols for ensuring that all students have access to well child visits and early childhood screening, and that the importance of education to child wellbeing is communicated to parents.

The Strategic Plan for Education also calls for collaborations with public and private behavioral health providers to expand the quality and quantity of in-school behavioral health services. Again, there is an opportunity to develop and leverage mutually beneficial partnerships between schools, state agencies, and healthcare providers to maximize access to behavioral health services in the school setting.

Rhode Island Department of Children, Youth, and Families (DCYF)

In the Rhode Island Title IV-B Child and Family Service Plan, DCYF identifies the priority to reduce reliance on congregate care and increasing community-based service supports for children and families through investments in effective wraparound care coordination. This priority aligns with SIM's emphasis on care integration, and offers a dynamic opportunity for partnership between DCYF, healthcare providers, and social service providers to implement a "no wrong door" approach and ensure coordinated access to medical, behavioral health, and social services, particularly among some of our most vulnerable citizens.

Rhode Island Department of Corrections (DOC)

The Governor's Working Group for Justice Reinvestment, established in July 2015, is tasked with improving the treatment of mental illness and substance abuse, among other directives. While a formal plan for achieving this task is not yet available, working group materials recommend requiring a behavioral health screening pre-arraignment to identify risks and needs, and to increase access to timely behavioral health services among probationers. This presents a clear opportunity for alignment with SIM's integrated population health, as access to quality behavioral health care is one of the plan's top priorities.

Division of Planning – Housing

In 2012 the Rhode Island Division of Planning, Housing Resources Commission collaborated with Rhode Island Housing and the United Way to develop a strategic plan for ending homelessness, entitled Opening Doors Rhode Island. One of the key goals of this plan is to improve health and housing stability through strengthening access to behavioral healthcare services among vulnerable populations, expanding access to primary care, and leveraging Medicaid funding to finance services in supportive housing. Access to both primary and behavioral health care aligns with the mission of the population health plan, and since permanent supportive housing interventions have been shown to demonstrate significant reductions in overutilization of medical resources, opportunities for collaboration should be of mutual interest to housing advocates and health reformers.

Division of Planning – Economic Development

Rhode Island Rising, the state's Economic Development Plan released in 2014, identifies an overarching goal of coordinating economic, housing, and transportation investments to yield economic gain, create resilient communities, and improve quality of life. A particular focus is on incorporating pedestrian and bicycle amenities into redevelopment opportunities and promoting alternative transportation to connect people to housing, jobs, and services. Aligning the population health plan with these goals presents a unique opportunity to address environmental and social determinants of health through the development of healthy communities.

The logical next step to building a community health business model would be to reach out to these state departments to establish a common vision, identify interventions, and explore available resources that can be leveraged.

Behavioral Health Proposals: Recognizing the Role of Trauma

Based on the world-renowned Adverse Childhood Experiences (ACEs) study⁶⁷, and subsequent follow-up studies, there is a strong correlation between the impact of childhood trauma and adult health and well-being. ACEs include verbal, physical, or sexual abuse, as well as indicators of family dysfunction including an incarcerated, mentally ill, or substance-abusing family member; domestic violence; or absence of a parent because of divorce or separation.

Significant findings from ACEs studies are that ACEs are prevalent among the general population; there is a strong and graded relationship between the number of categories of childhood exposure and the risk for *physical and behavioral health problems* in adult life; and respondents with the lowest educational attainment were significantly more likely to report five or more ACEs compared with those with higher education levels.⁶⁸ Conditions found to correlate with higher ACEs scores include Depression, Alcoholism and alcohol abuse, Illicit drug use, Suicide attempts, Early initiation of sexual activity, Unintended pregnancies, Sexually transmitted diseases (STDs), smoking, Chronic obstructive pulmonary disease (COPD), Ischemic heart disease (IHD), Liver disease, and fetal death.

If Rhode Island is going to impact the long-term health of its residents, exposure to childhood trauma must be addressed. In 2012, children were present in 31% of domestic violence incidents reported in Rhode Island.⁶⁹ The Department of Children, Youth and Families Initial CANS assessment results reported for the 3rd and 4th Quarters, FY 2015, indicate that 41%, 25% and 7% of children assessed were determined to have mild, moderate and severe problems with Adjustment to Trauma.⁷⁰ High rates of poverty, unemployment and untreated substance use disorders increase the likelihood of ACEs in Rhode Island's Core Cities.

There are a number of Evidence Based Practices (EBPs) for addressing trauma in children --- These therapies include child-parent psychotherapy, which has been shown to be effective for children under 5 who have experienced trauma including witnessing domestic violence, and uses play therapy as a vehicle for facilitating communication between the child and parent. This

⁶⁷ [http://www.ajpmonline.org/article/S0749-3797\(98\)00017-8/abstract](http://www.ajpmonline.org/article/S0749-3797(98)00017-8/abstract)

⁶⁸ <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5949a1.htm>

⁶⁹ 2014 Rhode Island Kids Count Factbook

⁷⁰ http://www.dcyf.ri.gov/docs/reports/CANS_Data_Overall_AgeBreakOut_Q3-Q4_20151015.pdf

EBP would likely be one of several approaches for providing “trauma-informed care” by the certified community behavioral health clinics (CCBHCs).

Addressing Social Determinants of Health

Housing

Affordable housing is a big concern of Rhode Island residents, especially for individuals with disabilities. In its 2014 Priced Out Report⁷¹, the Technical Assistance Collaborative illustrated the financial burden of housing for the 21,375 Rhode Islanders receiving Supplemental Security Income (SSI). The monthly SSI payment in Rhode Island is \$761. The average rent for a one-bedroom apartment in Rhode Island would exceed that amount by 3 %. Even an efficiency apartment would consume 92% of monthly SSI income for rent alone. To be considered “affordable,” rent burden should account for about 30% of an individual’s income.

There is a growing body of research that supports the lack of stable housing contributes significantly to high medical costs and poor health outcomes. Permanent Supportive Housing (PSH) is an evidence-based practice that impacts both for people with serious behavioral health conditions, including individuals who are chronically homeless. In an evaluation of a Rhode Island-based Housing First pilot project, individuals who were homeless served in PSH had a 400% reduction in inpatient days, 24-hr behavioral health care, ED visits, jail and prison stays and overnight stays in shelters.⁷² While past calculations indicated the rate of homelessness among those served by the Rhode Island mental health system as higher than the national average (5% versus 3.3%), only 2.6 percent of individuals with serious mental illness served by the Rhode Island mental health system received supportive housing.⁷³

Individuals with HIV/Aids also benefit from PSH. Two programs for persons living with HIV/AIDS in Rhode Island were awarded several million dollars in funding grants, offered through the U.S. Department of Housing and Urban Development’s (HUD) Housing Opportunities for Persons with AIDS Program (HOPWA) that provided service-enriched homes for dozens of families, allowing them to manage their illnesses while receiving critically-needed treatment and support services.⁷⁴ Federal grants are not a sustaining funding resource, however, and eventually require at least some level of state support to continue programs. In addition, Rhode Island’s grants targeted housing for families and were not accessible to individuals with HIV/AIDS.

Rhode Island needs a state strategy for expanding the availability of PSH. Mainstream housing resources exist, such as Housing Choice Vouchers. Rhode Island should build on efforts which have proven to be successful in other states to insure greater access to those vouchers for individuals with BH disorders. Ensuring a readily available, comprehensive array of BH services and supports is effective in increasing access to mainstream housing for individuals with significant BH challenges.

⁷¹ <http://www.tacinc.org/media/51752/Table%202.pdf>

⁷² Eric Hirsch & Irene Glasser, Rhode Island’s Housing First Program Evaluation, November 2008

⁷³ Truven demand report

⁷⁴ <https://www.ncsha.org/story/rhode-island-housing-funding-renewed-local-programs-persons-hiv aids>

Employment Strategy

In addition to housing, unemployment is highly associated with higher healthcare costs and poorer health outcomes. Rhode Island has the 4th highest rate of unemployment in the nation.⁷⁵

According to the Rhode Island Department of Labor and Training (DLT) the state has a higher percentage of individuals with disabilities than any other New England state. Among Rhode Islanders who have disabilities and are of working age (21 to 64), 40% are un-employed.⁷⁶ To address this concern, the DLT applied for and was awarded a Disability Employment Initiative (DEI) grant from the US Department of Labor. The funding is intended to synchronize and enhance programs that promote employment possibilities, provide employment-related tools and supports for jobseekers and workers with disabilities, and improve their effective and meaningful participation in the workplace. The project is targeted for adult jobseekers with disabilities, with a special emphasis on individuals with developmental and behavioral health disabilities, veterans with brain injuries, Temporary Assistance for Needy Families (TANF) (RIWorks), SSI and / or SSDI recipients.

Similar to housing, accessing mainstream resources for individuals with BH disorders is a good strategy. However, the “Workforce Investment Act (WIA) and Wagner-Peyser (W-P) Act Final Negotiated Performance Goals Summary Program Year (PY) 2014 Rhode Island” does not report data specifically for adults with behavioral health disabilities which makes it difficult to determine the impact of these resources for the behavioral health population.

Individual Placement and Support (IPS) is an evidence-based approach to Supported Employment (SE) for individuals with serious mental health disorders. IPS SE was readily available through the CMHCs prior to the loss of funding beginning in 2007, but presently there is very limited opportunity. SE services in Rhode Island are not currently focused on individuals with behavioral health disorders: the State and the City of Providence have entered into an Interim Settlement Agreement with the Department of Justice to increase SE opportunities for individuals with intellectual and developmental disabilities (IDD). Rhode Island is directing its resources toward SE services in order to meet this Agreement.

The prevalence of BH disorders among those interfacing with Rhode Island’s Corrections system underscores why access to treatment and diversion from incarceration are important strategies to improve employment, and subsequently healthcare, outcomes. Over 14,000 people were released from Rhode Island prisons in FY2012 and over 25,000 were on parole and probation.⁷⁷ Nationally, the Society for Human Resource Management reports that 80% of employers conduct criminal background checks on their employees. While having a criminal record does not automatically limit employment, DLT points out that in an economy with many more workers than jobs, a criminal record presents a significant additional barrier for potential workers in Rhode Island. Keeping people out of the criminal justice system will help increase their employment potential.

Education Strategy – To be Inserted, Pending Interviews with DCYF and RIDE

⁷⁵ 2013 Bradley Hospital Needs Assessment

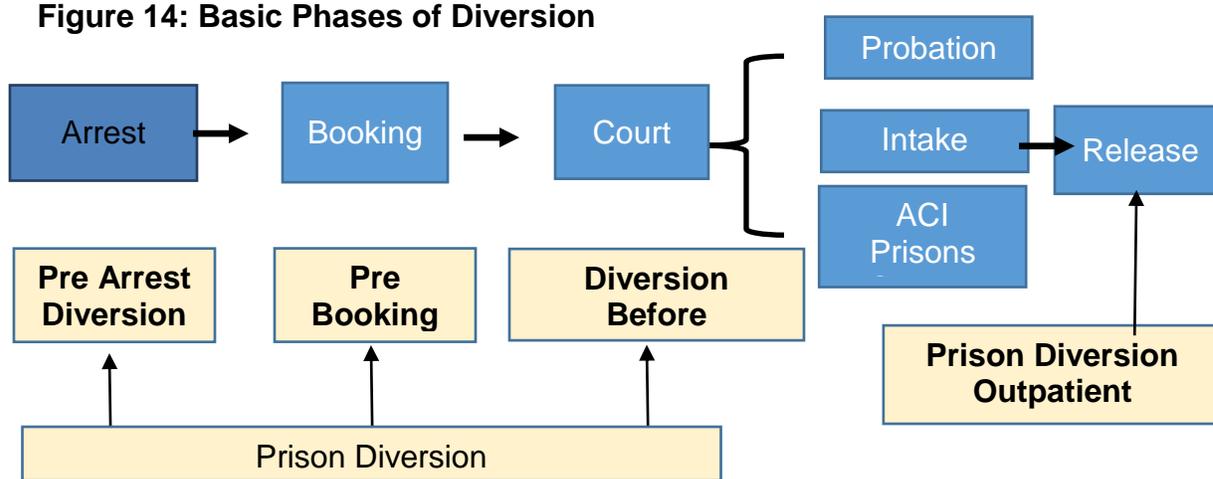
⁷⁶ <http://www.dlt.ri.gov/wio/IntegratedPlan.htm>

⁷⁷ Rhode Island Department of Corrections data, September 2012

Diversion from Criminal Justice

As previously stated, there is a high prevalence of behavioral health disorders among Rhode Islanders who interface with the criminal justice system, resulting in high costs and poor outcomes. Costs will continue to rise unless the cycle of untreated illness, incarceration, poor treatment adherence upon re-entry and re-incarceration is disrupted. There are multiple opportunities to intervene along the course of this trajectory, based on the Intercept Model. Developed by Drs. Mark Munetz and Patricia Griffin, the Sequential Intercept Model (SIM) identifies five conceptual points at which standard criminal processing can be interrupted to offer community-based alternatives: (1) law enforcement/emergency services; (2) initial detention/initial court hearings; (3) jails/courts; (4) re-entry; and (5) community corrections/support⁷⁸.

Figure 14: Basic Phases of Diversion



If awarded a CCBHC Demonstration grant, the 90/10 Federal Medical Assistance Percentage will support development of the Centers as designated points of accountability, and development of services and supports found to be effective at each of the point of intercept, thereby reducing further progression through the justice system.

Rhode Island has years of experience with court diversion. Family Court has years of experience with referring youth to Juvenile Drug Court pre-adjudication. Rhode Island Superior Court has been operating an Adult Drug Court for more than 10 years. Expanding opportunities through potential CCBHC funding would be viewed as building on the successes achieved to date. This will require collaboration across multiple agencies and the judiciary.

Human Resource Strategies

While funding for behavioral health services will go a long way to enhancing the service system, and improving behavioral health outcomes, funding will have a limited impact unless human resource issues are tackled as well. As with states across the nation, Rhode Island does not have adequate behavioral health staff resources to meet the level of service needs. Given that certain professions are in extreme short supply, such as child psychiatrists, a multi-pronged strategy is critical.

⁷⁸ To be inserted

Grand Rounds

Similarly, “Grand rounds,” or case consultations led by psychiatrists with groups of primary care providers, have proven effective for treating adults with behavioral health needs. An example is Project ECHO out of New Mexico.⁷⁹ Although originally developed to address shortages of medical specialists, the approach has been successfully adapted in states across the country to shoring up PCPs' expertise in diagnosing and treating behavioral health disorders.

Telepsychiatry

Telehealth has emerged as a cost-effective alternative to traditional face-to-face consultations or examinations between provider and patient. There are approximately 220 psychiatrists practicing in Rhode Island. Telepsychiatry can expand the reach of those resources to underserved areas and underserved populations, such as aging adults, as well as a means to reduce costs and complexities in accessing care for patients.

Forty-eight states and the District of Columbia provide some form of Medicaid reimbursement for telehealth services... Rhode Island does not. In addition, 32 states and the District of Columbia have policies impacting private payer coverage of telehealth.⁸⁰

Learning Collaboratives

RIDOH is helping to address the capacity of the primary care workforce through the Chronic Care Workforce Collaborative. Clinicians are being trained, share successes and challenges with each other and have access to healthcare resources such as the “Living Well RI Chronic Disease Self-management Program.” As a result, more than 1,000 people with chronic medical conditions including heart disease, lung disease, stroke (conditions with high rates of BH comorbidities) are seeing significant improvements in exercise, cognitive symptom management, communications with their physician, and their levels of health distress, fatigue and disability. This Collaborative could be expanded to include a greater focus on BH comorbidities and effective strategies to address them.

Likewise, the Learning Collaborative should be expanded to include BH professionals and clinicians. BH staff also need training and resources in better addressing PH co-morbidities for individuals they are serving. Virginia is funding a BH Learning Collaborative via their SIM initiative.

Mental Health Professional Shortage Areas (MHPSAs)

Clinicians may earn up to \$50,000 in loan repayment for making a two-year service commitment at a National Health Services Corp (NHSC) site. A facility may be eligible to become an NHSC-approved site if it:

- Is located in a Health Professional Shortage Area (HPSA)
- Provides primary care medical, dental, or mental and behavioral health services
- Provides services regardless of a patient's ability to pay

⁷⁹<http://echo.unm.edu/about-echo/>

⁸⁰ <http://www.ncsl.org/research/health/state-coverage-for-telehealth-services.aspx>

- Offers discounted fees to patients who qualify
- Accepts patients covered by Medicare, Medicaid, and Children's Health Insurance Program (CHIP)

Given that a number of Health Centers in Rhode Island qualify as Mental Health Professional Shortage Areas, applying to become an NHSC could be a viable option for those Centers in recruiting additional BH expertise.

Anti-depressant Medication Adherence

- Patients with at least 1 follow-up aftercare visit were more likely to be compliant with Medications
- Patients receiving follow-up care from MH providers were 22% more likely to comply

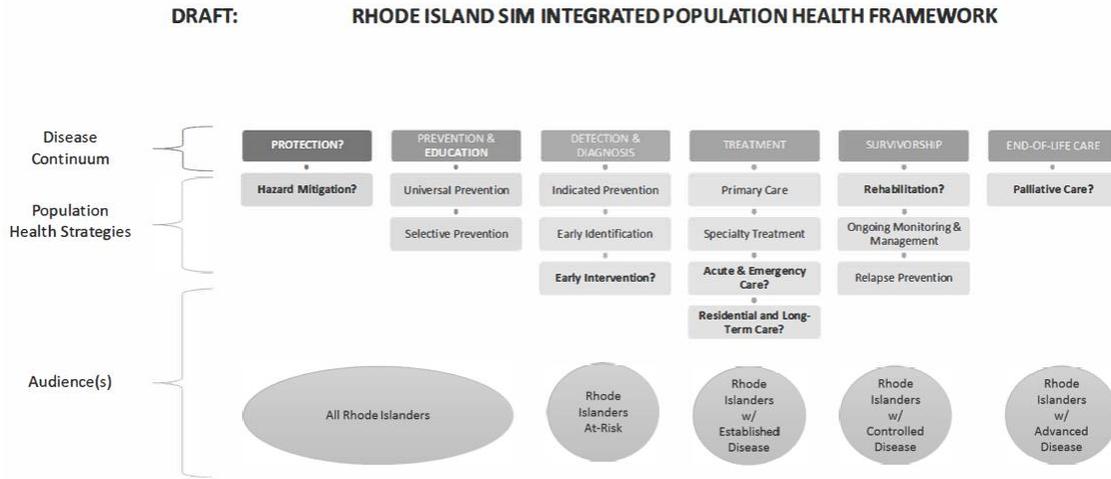
10. Implementation and governance plan

To be inserted – being written in coordination with the operations plan.

Additional frameworks/models that will be used as the population health planning sections are written:

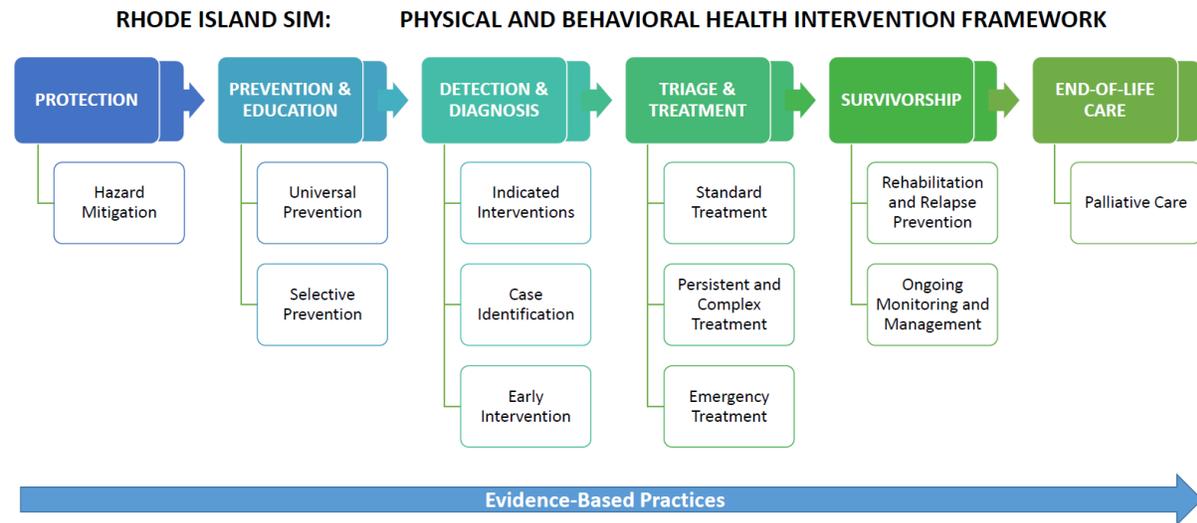
Chronic disease continuum/Population health models

Draft Figure 1



LEGEND:
BOLD / ? are proposed additions.

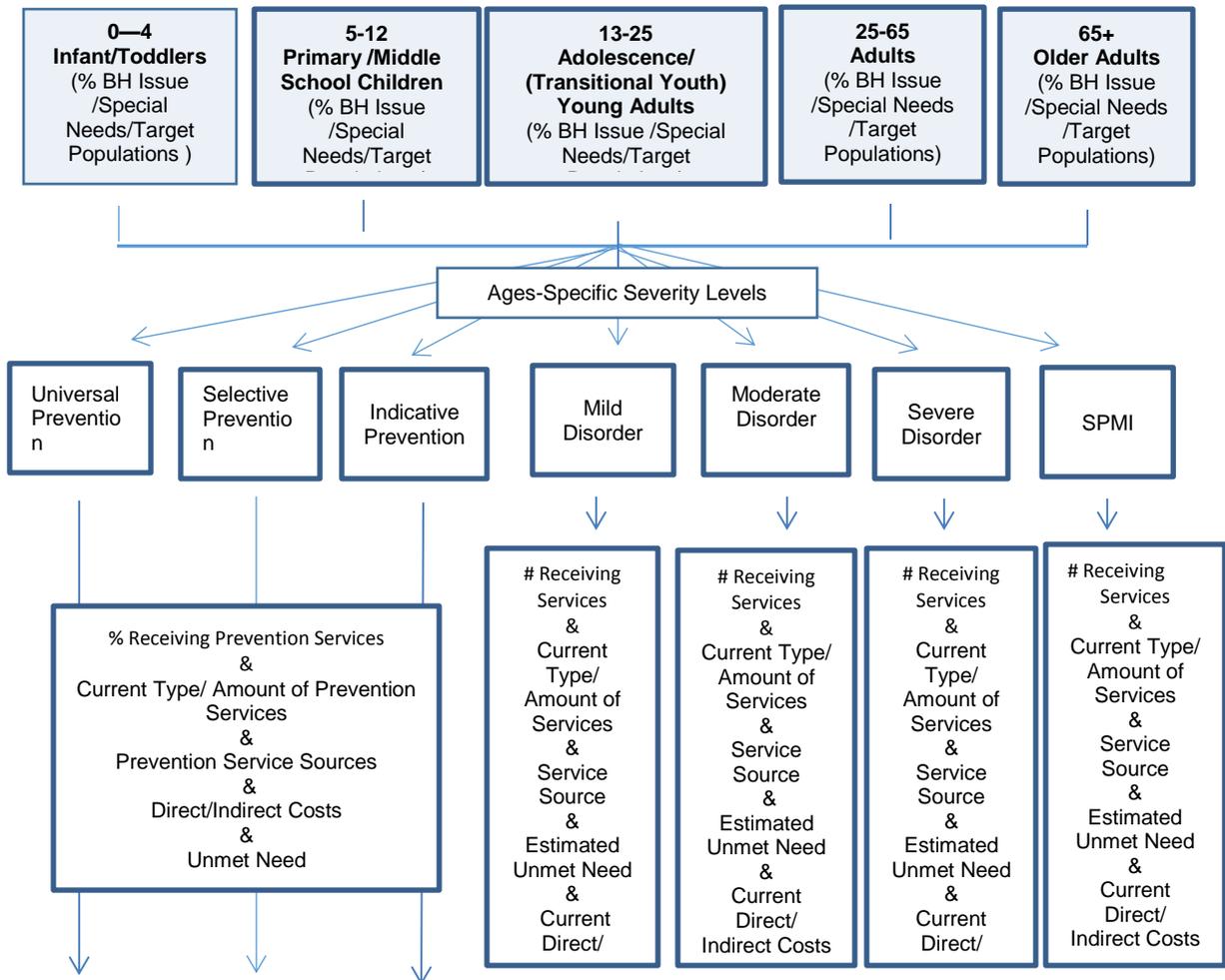
Draft Figure 2

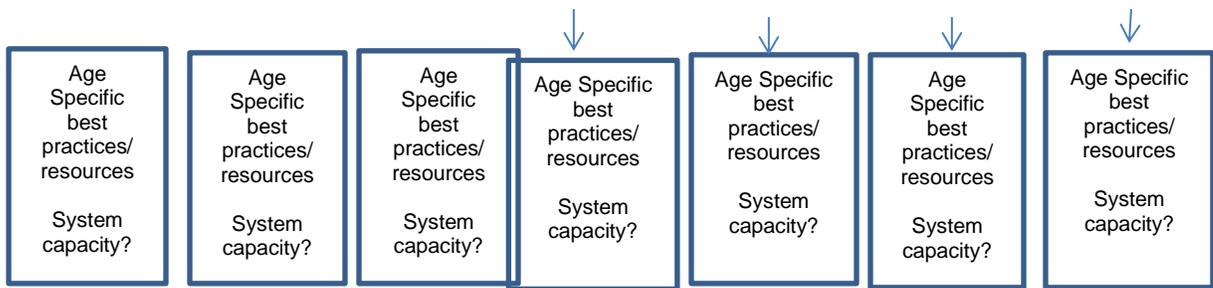


Draft Table 1: (from Population health metrics, IOM report)

✓	RBA Step 1:	Population: Identify the population you will be discussing
✓	RBA Step 2:	Result: Identify the specific result
✓	RBA Step 3:	Indicator: Identify data points that will measure your progress
✓	RBA Step 4:	The Story Behind the Trend: Identify what the indicators say, what the cause and forces are that affect these indicators
✓	RBA Step 5:	Key Partnerships: Identify partners with a role to play in turning the curve
✓	RBA Step 6a:	Steps Toward Action: Identify the 5 best ideas for Turning the Curve and improving the results
✓	RBA Step 6b:	Strategies: Identify which strategies are best suited to turning the curve in the areas identified above

Draft Figure 3: Behavioral Health Population Health Methodology





Draft Figure 4

Adverse Childhood Experiences Framework from CDC



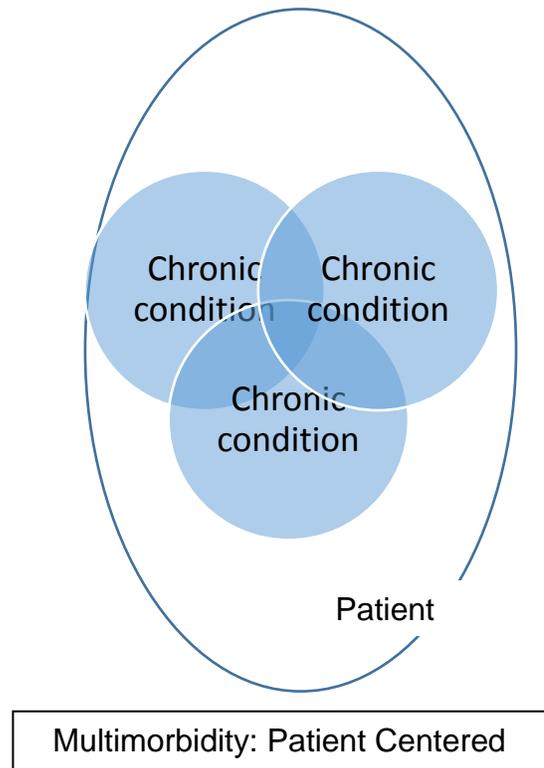
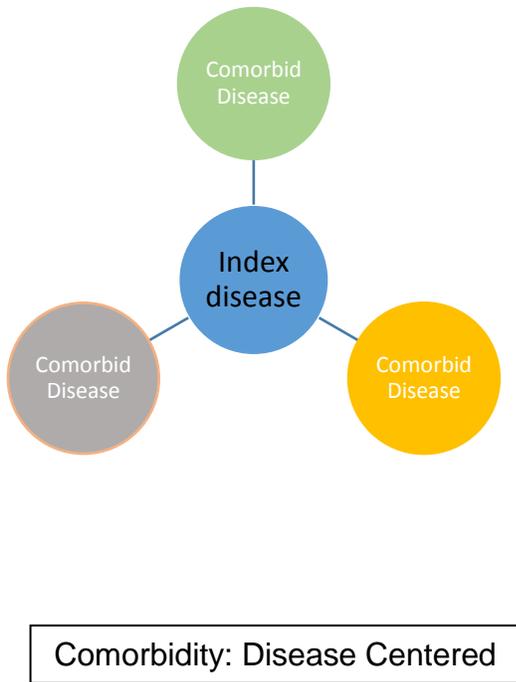
Draft Table 2: The Four Quadrant Clinical Integration Model⁸¹

	Quadrant II		Quadrant IV	
	BH – Hi	PH - Lo	BH – Hi	PH - Hi
Behavioral Health Risk/Complexity High	<ul style="list-style-type: none"> Behavioral health clinician/case manager w/ responsibility for coordination w/ PCP PCP (with standard screening tools and guidelines) Out-stationed medical nurse practitioner/physician at behavioral health site Specialty behavioral health Residential behavioral health Crisis/ED Behavioral health inpatient Other community supports 		<ul style="list-style-type: none"> PCP (with standard screening tools and guidelines) Out-stationed medical nurse practitioner/physician at behavioral health site Nurse care manager at behavioral health site Behavioral health clinician/case manager External care manager Specialty medical/surgical Specialty behavioral health Residential behavioral health Crisis/ ED Behavioral health and medical/surgical inpatient Other community supports 	
	Quadrant I		Quadrant III	
	BH – Lo	PH - Lo	BH – Lo	PH - Hi
Behavioral Health Risk/Complexity Low	<ul style="list-style-type: none"> PCP (with standard screening tools and behavioral health practice guidelines) PCP-based behavioral health consultant/care manager Psychiatric consultation 		<ul style="list-style-type: none"> PCP (with standard screening tools and behavioral health practice guidelines) PCP-based behavioral health consultant/care manager (or in specific specialties) Specialty medical/surgical Psychiatric consultation ED Medical/surgical inpatient Nursing home/home based care Other community supports 	
	Low			High

Persons with serious mental illnesses could be served in all settings. Plan for and deliver services based upon the needs of the individual, personal choice and the specifics of the community and collaboration.

⁸¹ Behavioral Health / Primary Care Integration and the Person-Centered Healthcare Home, the National Council for Community Behavioral Healthcare, 2009.

Draft Figure 5. Co-morbidity vs. Multi-morbidity⁸²



⁸² Boyd C, Fortin M. Future of multimorbidity research: How should understanding of multimorbidity inform health system design. *Public Health Reviews* 2010, 32 (2): 451-474

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