



**Rhode Island Hospital/
Hasbro Children's Hospital**
A Lifespan Partner



Community Health Needs Assessment

September 30, 2013

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Executive Summary

Rhode Island Hospital and its pediatric division, Hasbro Children's Hospital, operate at the epicenter of the community's most urgent health needs. As a major tertiary hospital, a leading pediatric hospital, and a dynamic academic medical center, Rhode Island Hospital and its Hasbro Children's Hospital address the full spectrum of medical and surgical needs experienced by adults and children in Rhode Island and southeastern New England.

Site of the region's only Level I Trauma Center, Rhode Island Hospital heals the damage done by violence, addiction, and accidental injury. Located on Providence's South Side, in one of Rhode Island's poorest neighborhoods, the hospitals' emergency departments and clinics provide a critically important medical safety net for all in need. The medical staffs of Rhode Island Hospital and Hasbro Children's Hospital comprise the largest hospital-based concentration of faculty members and researchers affiliated with Alpert Medical School of Brown University – many of whom are actively engaged in public health research and advocacy efforts focused on issues that address the community's health needs.

In addition to the invaluable insights born of daily clinical experience, Rhode Island Hospital and its Hasbro Children's Hospital continuously pursue more formal initiatives to assess community need – gathering insights from both patients and community physicians to ensure that its services are well calibrated to the needs of its community. Population-based studies (examining growth and changes in population, community resources, and the shifting prevalence of diseases) are regularly conducted to review need for inpatient services for adults and children – combining with review of a variety of other metrics, including wait times, staffing levels, and changing standards of care, to assess demand for additional services needed to provide access to high-quality care.

Over the past decade, Rhode Island Hospital has undertaken an array of initiatives, of varying scale, to address community need – from building a new Emergency Department, new surgical facilities, and new patient care units to clinical innovations such as radiofrequency ablation for hard-to-treat tumors. Hasbro Children's Hospital continues to innovate on behalf of children, launching new initiatives such as its new Medical/Psychiatric Program, which treats children and adolescents with both challenging mental health and medical conditions in a newly renovated, secure, eight-bed unit featuring private and semi-private rooms and areas for family, group, and milieu therapy.

Between September 2011 and May 2013, in order to gain greater insight into the health status and health care needs of the people served by Rhode Island Hospital and its Hasbro Children's Hospital, a community health needs assessment (CHNA) was conducted by Lifespan, a Rhode Island-based healthcare system (*defined below*) of which the hospital is a member. The CHNA was conducted concurrently and collaboratively with those of the other three hospitals that are also Lifespan affiliates, with the goal of maximizing efficiency and impact – in both data collection and crafting implementation plans – by leveraging synergy across institutions.

About Rhode Island Hospital and its community

Rhode Island Hospital celebrates its 150th anniversary in 2013. The hospital was founded in 1863, in response to the medical needs of returning Civil War veterans and the growing community of urban poor in an increasingly industrialized Rhode Island, many of whom were living in conditions that presented barriers to healing and recovery. It has since grown to encompass a comprehensive range of diagnostic and therapeutic services, delivered in a 719-bed, nonprofit acute care teaching hospital.

Hasbro Children's Hospital – the pediatric division of Rhode Island Hospital – opened in 1994, replacing the hospital's cramped pediatric wing with a larger, significantly more sophisticated facility. Since its inception, Hasbro Children's Hospital – which will celebrate its twentieth anniversary in 2014 – has become a regional hub for pediatric medicine in southeastern New England. The hospital is located on the Rhode Island Hospital campus, contiguous to the adult hospital. It offers a wide range of facilities, programs, and services for children and adolescents – from a full-service, 24-hour pediatric emergency department to a dedicated pediatric imaging center to an array of specialty services, including pediatric neurodevelopment services, cancer care, and pediatric surgery.

In 1994, Rhode Island Hospital partnered with The Miriam Hospital to create Lifespan, Rhode Island's first health care system, a nonprofit organization designed to leverage efficiencies in strategic planning and initiatives, capital and operating budgets, and overall governance of the consolidated organization and to identify opportunities for clinical growth and collaboration. The Miriam Hospital and Rhode Island Hospital and its Hasbro Children's Hospital are teaching affiliates of Alpert Medical School of Brown University (*see below*). Lifespan also includes Bradley Hospital, a children's psychiatric hospital that is also a Brown-affiliated teaching hospital; Newport Hospital, a community hospital; and Gateway Healthcare, the region's largest behavioral health provider. In 2009, Rhode Island Hospital and The Miriam Hospital began to integrate clinical programs and services across their two campuses.

A founding teaching affiliate of Alpert Medical School of Brown University, Rhode Island Hospital was named the medical school's Principal Teaching Hospital in 2010. The hospital serves as a major clinical training site for residents in a wide range of disciplines, including internal medicine, oncology, orthopedics, neurosciences, general surgery and surgical subspecialties, pediatrics, dermatology, radiology, psychiatry, obstetrics/gynecology, podiatry, and more. As the site of some of the nation's most competitive residency programs, the hospital attracts top medical talent from across the United States. Rhode Island Hospital also has affiliations with several nursing programs in the northeast, based at colleges and universities in Rhode Island, Massachusetts, Connecticut, and Pennsylvania.

The hospital is a regional and national leader in medical education, research, and clinical care. In addition to serving as the designated Level I Trauma Center for the state of Rhode Island and southeastern Massachusetts, Rhode Island Hospital provides an array of medical/surgical services and behavioral

health services for adults, adolescents, and children – including the Bradley-Hasbro Children’s Research Center, a unique collaboration that blends the clinical and research resources of Hasbro Children’s Hospital with the renowned pediatric psychiatry expertise of Bradley Hospital.

Rhode Island Hospital has brought many clinical innovations to southeastern New England, from Rhode Island’s only kidney transplantation service to one of the nation’s first gamma knife surgical centers, offering intracranial stereotactic radiosurgery for non-invasive treatment of brain lesions. In 2007, the hospital was the first in New England to place a cardiac catheterization lab in its Emergency Department. Rhode Island Hospital clinical leaders are active participants in the Brown University Institute for Brain Science, a large, multidisciplinary initiative designed to understand the brain and identify new therapies for a range of neurological diseases and conditions.

In 2012, Rhode Island Hospital and its affiliates provided nearly \$152.2 million in net community benefit expenses for its patients, which accounted for almost 15% of its total expenses.

Rhode Island Hospital provides full charity care for individuals at or below twice the federal poverty level, with a sliding scale for individuals up to four times the poverty level. In terms of charity care – which is included as part of community benefit expenses – the hospital provided almost \$63 million in total financial assistance at cost to patients in 2012. In addition to this financial assistance, the hospital and its affiliates provided nearly \$83.9 million in medical and health professions education, nearly \$9.0 million in subsidized health services—including adult psychiatry, dentistry, adolescent medical/surgical services, and Alzheimer’s care, as well as the Center for Special Children, early intervention and other specialty services—and \$11.3 million in unfunded medical research.

Rhode Island Hospital also provides many other services to the community for which charges are not generated, including certain emergency services; community health screenings for cardiac health, prostate cancer, and other diseases; smoking cessation; immunization and nutrition programs; diabetes education; support groups for people coping with the effects of stroke, burn injuries, and other illnesses and injuries; community health training programs; patient advocacy; and foreign language translation.

Population Characteristics

Rhode Island Hospital and its affiliates serve patients from throughout Rhode Island and southeastern Massachusetts. About half of the hospital’s patients come from Providence County, with about 25% coming from the city of Providence.

More than two-thirds (68.2%) of all outpatient encounters – adults and pediatrics combined – come from Rhode Island’s urban core region, including Providence (36.6%), Cranston (13.6%), Pawtucket (6.4%), and Warwick (4.7%). On the inpatient side, slightly more than half of all inpatient admissions (54%) come

from the urban core, with nearly 22.1% of all inpatients coming from Providence, 13.5% from Cranston, 6.9% from Warwick, 4.3% from Pawtucket, and 3% from Johnston, Rhode Island.

The 2010 United States Census documented 178,042ⁱ people living in the city of Providence and 1,052,567ⁱⁱ people in the state of Rhode Island. The median age in the city of Providence was 28.5 in 2010,ⁱⁱⁱ which is much younger than the statewide median age of 39.4.^{iv} Nearly 8.7% of Providence's population is over the age of 65,^v compared to 14.4% of the population statewide. Rhode Island has an older population when compared to the nation as a whole.^{vi} The median age in the United States in 2010 was 37.2 and only 13.1% of the population was over the age of 65.^{vii}

Providence is a "majority-minority" city.^{viii} According to the 2010 United States Census, 93.5% of the city's population identified as "one race;" of this population, 49.8% was White, 16% Black or African-American^{ix} (compared to 5.6% statewide^x), 38.1% Hispanic or Latino^{xi}, and 6.4% Asian.^{xii} According to 2011 American Community Survey data, 29.4% of the city's population was foreign-born, with 66.2% of the foreign-born population coming from Latin American countries.^{xiii} Slightly more than half (52.1%) of all Providence households speak English-only at home.^{xiv} Nearly 48% of all Providence households speak a language other than English at home, with 34.9% of all Providence households speaking Spanish.^{xv}

Income and Employment

In 2011, the median household income in Providence was \$38,922,^{xvi} which is significantly lower than the statewide median income of \$55,975.^{xvii} The per capita income in the city was \$21,628,^{xviii} which again was lower than the statewide per capita income of \$29,865.^{xix} Twenty-three percent of all Providence households lived with annual income of under \$15,000 a year,^{xx} a considerably greater percentage than the 15.4% of all households statewide that lived under \$15,000 annually.

Nearly one-quarter (23.1%) of all households in Providence received Supplemental Nutrition Assistance Program (SNAP) benefits in the past year,^{xxi} which was over double the percentage of households statewide (10.7%) that received SNAP benefits.^{xxii} Nationwide, the median income in the United States in 2011 was \$52,762; per capita income was \$27,915; 12.3% of all households in the United States lived with incomes of under \$15,000 annually; and 10.2% of households received SNAP benefits within the past year.^{xxiii}

As of July 2013, the Bureau of Labor Statistics reported an unemployment rate of 10.2% in the Providence metro area – but 12.7% in Providence and 12.6% in Fall River, the closest city in southeastern Massachusetts.^{xxiv} Rhode Island's statewide unemployment rate is the fourth highest in the nation at 8.9%, down from 10.6% in 2012.^{xxv} (The New England average unemployment rate, as of May 2013, was 6.6%, with Connecticut at 8.0%, Maine at 6.9%, Massachusetts at 6.4%, New Hampshire at 5.5%, and Vermont at 4.0%.^{xxvi})

Statewide Perspective

Rhode Island Hospital and its Hasbro Children's Hospital serve people from virtually every city and town in Rhode Island, as well as Massachusetts border communities. Rhode Island's compact, densely populated geography – the state's 1,045 square miles are home to slightly over 1 million people, according to the 2010 census – facilitates considerable mobility among communities. Moreover, cross-institutional collaboration and referral is fostered among Lifespan member hospitals for a wide range of specialty services, including but not limited to oncology, pediatric services, trauma care, and surgery.

For these reasons, the community surveyed under the CHNA belongs to the Providence-Warwick, RI-MA Metropolitan New England City and Town Area (NECTA) – defined by the Office of Management and Budget in February 2013^{xxvii}. This area includes all of Providence County, Bristol County, Kent County; six of the nine towns in Washington County; all six towns in Newport County; and parts of Bristol, Norfolk and Worcester County in Massachusetts.

Objectives and Methodology

The goals of Rhode Island Hospital's Community Health Needs Assessment were:

- **To enhance the hospital's perspective on the healthcare needs of its community**
- **To establish a baseline data set and analysis upon which future work can build**
- **To provide a resource for individuals and organizations interested in health status of the community served by Rhode Island Hospital/Hasbro Children's Hospital**
- **To inform creative discussions and collaborations to improve the health status of the community**
- **To meet the requirements of the Patient Protection and Affordable Care Act, which calls for nonprofit hospitals to periodically assess the health needs of people living in their service area**

The CHNA encompassed intensive data collection and analysis, as well as qualitative research in the forms of interviews with and surveys of more than 100 internal and external stakeholders, including hospital-based physicians, nurses, social workers, administrators and other professionals, and community-based stakeholders representing constituencies served by Rhode Island Hospital and Lifespan's three other hospitals.

Highlights of Findings

Self-reported data included in the 2011 Behavioral Risk Factor Surveillance System (BRFSS) surveys of the Centers for Disease Control and Prevention (CDCP) reveal 82.6% of Rhode Island adults describing their health as "excellent, very good, or good." Nearly 62% of Rhode Island adults reported no physically unhealthy days per year, while 86.20% reported fewer than 13 "physically unhealthy days" per year.^{xxviii}

According to 2011-2012 National Survey of Children's Health data, 86.8% of Rhode Island children were described as having "excellent or very good health," compared to 84.2% of children nationwide, 88.7% of children in Massachusetts and 85.8% of children in Connecticut.^{xxxix} While fewer children in Rhode Island reported fair/poor health status (3.1%) than nationwide (3.2), the state's rates were higher (worse) than in neighboring Massachusetts (2.0%) and Connecticut (1.9%).^{xxx}

Quantitative and qualitative analysis crystallized around five health needs of paramount concern in the community served by Rhode Island Hospital and its Hasbro Children's Hospital:

- **Access to care**

Community stakeholders, in Providence and statewide, consistently cited aspects of access to care (i.e. access to health services, cost of services, access to health insurance, health literacy, and other factors) as major challenges facing their constituencies, with access concerns particularly pronounced among stakeholders representing minority populations. The top three most significant health issues cited were all related to access to care: *access to health insurance* (77.1% of respondents); *access to primary care* (74.3%), and *access to mental health services* (74.3%). Providence County's percentage of uninsured adults (17.13%) exceeds the statewide average (14.1%).^{xxxix}

- **Asthma**

Rhode Island has the third highest self-reported lifetime asthma rate (over 16%) in the United States for adults over the age of 18.^{xxxii} The state has the second highest rate for current adult asthma, at over 10%.^{xxxiii} It is estimated that 37,250 Rhode Island children (17.1%) have been diagnosed with asthma at some point in their lifetime, compared to 14.5% of children nationwide.^{xxxiv} Approximately 23,700 children in Rhode Island (10.9% of the state's children) currently have asthma – compared with 8.8% of children nationwide.^{xxxv} The issue is closely tied to demographics; Rhode Islanders living in households with income of less than \$25,000 experience asthma at a rate about 4% higher than those in households with income above that level, and asthma is most prevalent in Providence County, where adult hospitalization rates for the diagnosis are nearly double the statewide average.

- **Cancer**

Cancer is the second-leading cause of mortality in Rhode Island, as it is nationwide.^{xxxvi} However, Rhode Island has one of the highest cancer incidence rates in the nation. In 2009, Rhode Island's age-adjusted cancer incidence rate (491.4 cases per 100,000) was the fourth highest in the nation.^{xxxvii} The leading types of cancer incidence in Rhode Island were female breast cancer (135.2 per 100,000), prostate cancer (134.8/100,000), lung cancer (72.2/100,000), and colon (41.9/100,000).^{xxxviii} The state ranks 26th nationally for cancer mortality in the United States.

- **Healthier Weight**

Issues related to healthier weight – including nutrition, overweight/obesity, diabetes, hypertension, childhood overweight/obesity, heart disease, and stroke – were cited by community stakeholders as being among their constituents' top health concerns. Heart disease is the leading cause of death in Rhode Island, as it is across the United States, and Rhode Island's heart disease mortality exceeds that of the nation as a whole. However, the state's diabetes mortality rate is slightly lower than the national average. Obesity and diabetes rates in Rhode Island are below the national median, but higher than rates

in both Massachusetts and Connecticut. The state exceeds the national and regional rates for overweight, heart disease mortality rates, and other behavioral and medical risk factors such as physical inactivity and borderline diabetes.

While interviews and survey responses did not cite direct correlations, healthier weight is related to many of the other health and social issues identified. Poverty, unemployment, access to care challenges, mental illness, health literacy, and even asthma can affect lifestyle choices and other factors influencing healthy weight, such as ability to select, purchase, or cook nutritious meals; time, motivation, and safe places for exercise; and access to health services for the diagnosis and treatment of endocrine disorders and other medical conditions that may present a barrier to maintaining healthy weight.

- **Mental Health**

Mental health and addiction were cited as top concerns among community stakeholders. Rhode Island has the highest rate of mental illness in the United States, with 24.2% of residents reporting any type of mental illness (compared with 19.7% nationwide).^{xxxix} Incidence of serious mental illness (defined as “a diagnosable mental disorder that substantially interfered with or limited one or more major life activities” – is nearly double the national rate (7.2% vs. 4.6%).^{xi} The percentage of Rhode Island adults reporting major depressive episodes in the past year also far exceeded the national average, with 9.5% of Rhode Islanders reporting such events in 2010 compared with 6.5% of all Americans.^{xii} Rhode Islanders between 35 and 64 experienced the nation’s third highest increase in suicide between 1999 and 2010.^{xiii}

Rhode Island has the second highest illegal drug use rate in the country, only behind Vermont.^{xliii} Drug-related deaths – mostly from opioids such as heroin and oxycodone – claimed the lives of 193 Rhode Islanders in 2008.^{xliii} Rhode Island is one of only 16 states in which the number of deaths from opioid overdose now exceeds the number of motor vehicle fatalities.^{xliii} Providence County has the second-highest drug-related mortality rate in Rhode Island (20.1 deaths per 100,000 people), compared to a statewide rate of 18.4 deaths/100,000 people.^{xliii} Kent County had the highest drug-related death rate at 20.8 per 100,000, Washington County had the third highest, (15/100,000), followed by Newport County (11.2/100,000), and Bristol County (8.0 deaths/100,000).^{xliii}

Implementation Strategy

The people of Rhode Island Hospital look forward to continuing to identify critical health issues facing its community, and to working with community partners to address those issues as effectively as possible in the context of its mission and expertise, while sustaining the hospital’s capacity to serve as a vital health care provider for Providence and Rhode Island. The hospital plans to continue or pursue initiatives in the following five statewide areas of need identified by the Community Health Needs Assessment. [A full description of these programs can be found in the Implementation Strategy section of the report.]

- **Access to Care**

As a major employer, with 5,993 employees, Rhode Island Hospital is a key source of employer-based health insurance. The hospital also serves as a lifeline for critical health services, Rhode Island Hospital and its affiliates provided nearly \$152.2 million in net community benefit expenses for patients (almost 15% of total expenses) in FY2012. The hospital provided almost \$63 million in total financial assistance at cost to patients. In addition to this community benefit, Rhode Island Hospital, in collaboration with its Lifespan affiliated hospitals, plans to:

- Enhance access to prescription drugs onsite for hospital patients
- Expand access to ambulatory care
- Provide oral health screenings for children enrolled in Head Start
- Partner with Providence Community Health Centers
- Promote women’s health and access to health services
- Promote health literacy statewide
- Offer *Healthwise* Workshops
- Provide free health screenings statewide
- Offer AED Grants Program
- Provide training for health care professionals through the Lifespan Community Training Center

▪ **Asthma**

The disease burden of asthma incidence and hospitalization is most severe in Rhode Island’s urban core and Providence County. Asthma among adults is best managed in the primary care setting, such as Rhode Island Hospital’s new community primary care centers. The hospital also plans to continue to address adult asthma through its Patient Prescription Program (PPP), which provides free two-week inhaler doses for a significant number of patients. Hasbro Children’s Hospital treats 3,651 children and adolescents each year in its Asthma and Allergy Center, and will continue to provide hospital-based services for children while exploring opportunities to partner with community-based organizations to address this critical children’s health issue.

▪ **Cancer**

Rhode Island Hospital’s most significant contribution to the state’s efforts to address cancer is its status as a site of Lifespan’s Comprehensive Cancer Center, which provides access to a broad range of cancer services, as well as the benefits of leading-edge research, close to home. The presence of this service in Providence is particularly vital to individuals who are in need of lifesaving cancer treatment but lack transportation or means to travel for care. In addition to the preventive, diagnostic, treatment, and survivorship benefits of the Comprehensive Cancer Center, Rhode Island Hospital and other Lifespan affiliates are exploring the following initiatives to enhance cancer prevention and treatment:

- Expansion of the Comprehensive Cancer Center
- Avenues of Healing
- Cancer Survivors Day 2014
- Kickbutt Day
- Tobacco Prevention Programs
- Lectures about smoking, smoking cessation, and cancer
- SunSmarts

▪ **Healthier Weight**

Rhode Island Hospital provides an array of programs designed to help its community achieve healthier weight. In addition, the hospital and other Lifespan affiliates are exploring the following initiatives:

- Partnership Between the YMCA and the Cardiovascular Institute
- Community BMI screenings
- Nutrition program in partnership with Rhode Island Free Clinic
- Lectures
- Partnership with Providence School District

- Partnership with Overeaters Anonymous
- Sharing lessons learned from Lifespan's Workforce *Healthy Rewards* Program

- **Mental Health**

Rhode Island Hospital has developed, or is in the process of developing, an array of partnerships, programs, policies and initiatives – in collaboration with other Lifespan affiliates– designed to prevent mental illness and reduce the burden of mental health in its community. Each strategy is described in greater detail in the report.

- Creation and expansion of space within the emergency department for highly specialized psychiatric care for patients
- New inpatient unit for dual-diagnosed patients at Hasbro Children's Hospital
- Expansion of partial-hospitalization program
- Leverage the value of Gateway Health as a Lifespan member
- Expanding *Mental Health First Aid* Offered by Gateway Health
- Temas Familiares
- Lectures

Rhode Island Hospital was founded to serve the public good and address the health care needs of its community, and continues to sustain deeply-held mission, vision, and values that support and advance those goals. The aforementioned programs and strategies are designed to further enhance its efforts to meet critical community health needs.

Introduction

Between September 2011 and May 2013, a community health needs assessment (CHNA) was conducted on behalf of Rhode Island Hospital by Lifespan, a health system of which the hospital is a founding member. The quantitative and qualitative data collected through the CHNA reflect the hospital's broad scope of service and catchment area, defined as the state of Rhode Island and nearby southeastern Massachusetts.

About Rhode Island Hospital

Rhode Island Hospital celebrates its 150th anniversary in 2013. The hospital was founded in 1863, in response to the medical needs of returning Civil War veterans and the growing community of urban poor in an increasingly industrialized Rhode Island, many of whom were living in conditions that presented barriers to healing and recovery. It has since grown to encompass a comprehensive range of diagnostic and therapeutic services, delivered in a 719-bed, nonprofit acute care teaching hospital.

Hasbro Children's Hospital will celebrate its twentieth anniversary in 2014. The pediatric division of Rhode Island Hospital opened in 1994, replacing the hospital's cramped pediatric wing with a larger, significantly more sophisticated facility that would become a regional hub for pediatric medicine in southeastern New England. Hasbro Children's Hospital is situated on the Rhode Island Hospital campus, with corridors linking it to the adult hospital. It offers a wide range of facilities, programs, and services for children and adolescents – from a full-service, 24-hour pediatric emergency department to a dedicated pediatric imaging center to an array of specialty services, including pediatric neurodevelopment services, cancer care, and pediatric surgery.

In 1994, Rhode Island Hospital partnered with The Miriam Hospital to create Lifespan, Rhode Island's first health care system, a nonprofit organization designed to leverage efficiencies in strategic planning and initiatives, capital and operating budgets, and overall governance of the consolidated organization and to identify opportunities for clinical growth and collaboration. Lifespan encompasses Rhode Island Hospital and its Hasbro Children's Hospital, The Miriam Hospital, and Bradley Hospital, all of which are Brown-affiliated teaching hospitals; Newport Hospital, a community hospital; and Gateway Healthcare, the region's largest behavioral health provider. In 2009, Rhode Island Hospital and The Miriam Hospital began to integrate clinical programs and services across their two campuses.

A founding teaching affiliate of Alpert Medical School of Brown University, Rhode Island Hospital was named the medical school's Principal Teaching Hospital in 2010. The hospital serves as a clinical training site for residents in a wide range of disciplines, including internal medicine, oncology, orthopedics, neurosciences, general surgery and surgical subspecialties, pediatrics, dermatology, radiology, psychiatry, obstetrics/gynecology, podiatry, and more. Rhode Island Hospital also has affiliations with

several nursing programs in the Northeast, based at colleges and universities in Rhode Island, Massachusetts, Connecticut, and Pennsylvania.

Rhode Island Hospital is a regional and national leader in medical education, research, and clinical care. In addition to serving as the designated Level I Trauma Center for the state of Rhode Island and southeastern Massachusetts, Rhode Island provides an array of medical/surgical services and behavioral health services for adults, adolescents, and children – including the Bradley-Hasbro Children’s Research Center, a unique collaboration with the Bradley Hospital that blends the clinical and research resources of Hasbro Children’s Hospital with those of Bradley Hospital, a pediatric psychiatric hospital that is also a Lifespan member.

Rhode Island Hospital has brought many clinical innovations to southeastern New England, from Rhode Island’s only kidney transplantation service to one of the nation’s first gamma knife surgical centers, offering intracranial stereotactic radiosurgery for non-invasive treatment of brain lesions. Rhode Island Hospital clinical leaders are active participants in the Brown University Institute for Brain Science, a large, multidisciplinary initiative designed to understand the brain and identify new therapies for a range of neurological diseases and conditions.

In 2012, Rhode Island Hospital and its affiliates provided \$152.2 million in net community benefit expenses, which accounted for almost 15% of its total expenses. Rhode Island Hospital provides full charity care for individuals at or below twice the federal poverty level, with a sliding scale for individuals up to four times the poverty level. In terms of charity care – which is included as part of community benefit expenses – the hospital provided almost \$63 million in total financial assistance at cost to patients. In addition to this financial assistance, the hospital and its affiliates provided nearly \$83.9 million in medical and health professions education, nearly \$9.0 million in subsidized health services—including adult psychiatry, dentistry, adolescent medical/surgical services, and Alzheimer’s care, as well as the Center for Special Children, early intervention and other specialty services—and \$11.3 million in unfunded medical research.

Rhode Island Hospital also provides many other services to the community for which charges are not generated, including certain emergency services; community health screenings for cardiac health, prostate cancer, and other diseases; smoking cessation; immunization and nutrition programs; diabetes education; support groups for people coping with the effects of stroke, burn injuries, and other illnesses and injuries; community health training programs; patient advocacy; and foreign language translation.

Demographics of Patients Served by Rhode Island Hospital

Patient origin

Of the nearly 275,000 outpatient encounters at Rhode Island Hospital and Hasbro Children's Hospital each year, 92.5% of patients live in Rhode Island. About 5.9% of all outpatients come from Massachusetts. On the pediatric side, 91.6% of outpatient encounters represent Rhode Island residents; 7.2% of pediatric outpatients come from Massachusetts. Adult outpatient encounters pull slightly more heavily from Rhode Island than Massachusetts (93.2% and 4.9% respectively).

Over two-thirds (68.2%) of all outpatient encounters – adults and pediatrics combined – come from Rhode Island's urban core region. The largest concentration of outpatient encounters represents patients living in Providence (36.6%), Cranston (13.6%), Pawtucket (6.4%), and Warwick (4.7%).

Nearly 5% of all adult and pediatric outpatient encounters involve patients from East Providence. Another 2.3% of outpatients come from the neighboring Massachusetts communities of Attleboro, North Attleboro, Plainville, Wrentham, Seekonk, Rehoboth, and Dighton. Slightly more than 7% of Rhode Island Hospital's outpatients reside in Rhode Island's East Bay, with the largest concentrations residing in Bristol (1.3%), Barrington (1.1%) and Warren (0.9%). Southern Rhode Island is home to 5.6% of the hospital's outpatients—with the largest concentration coming from Coventry (1.4%) and East Greenwich (0.8%). Northwestern Rhode Island accounts for 5.1% of the hospital's outpatients, with the largest concentration of outpatients residing in Woonsocket (2.3%).

The geographic distribution of Rhode Island Hospital's inpatient population is similar to the outpatient population, with a slightly higher percentage of patients coming from outside of the state. About 88% of the hospital's 34,000 total adult and pediatric inpatient admissions come from Rhode Island, while 9.7% of inpatients come from Massachusetts. A smaller portion of pediatric inpatient admissions (80.3%) come from Rhode Island compared to adult inpatient admissions (89.6%). Over 17% of pediatric inpatient admissions come from Massachusetts.

More inpatient admissions come from outside of Rhode Island's urban core region than do outpatient encounters. Slightly more than half of the hospital's inpatient admissions (54%) come from the urban core, with nearly 22.1% of all patients living in Providence, 13.4.8% of inpatients in Cranston, 6.9% in Warwick, 4.3% in Pawtucket and 3% in Johnston, Rhode Island.

About 15% (14.9%) of all inpatients live in the I-95 Corridor region, with the largest concentrations of inpatients coming from East Providence (6.8%), Cumberland (2.0%), Lincoln (1.2%) and Smithfield (1.2%). About 8.5% of the hospital's inpatients come from southern Rhode Island — with the largest concentration of patients coming from Coventry (2.5%), North Kingston (1.5%) and East Greenwich (1.1%). Northwestern Rhode Island accounts for 6.1% of all inpatients, with the largest concentration coming from Woonsocket (2.4%).

Patient ethnicity

Rhode Island Hospital's patient population reflects the following characteristics:

TOTAL PEDIATRIC OUTPATIENT POPULATION

- **Non-Hispanic White:** 48.3%
- **Non-Hispanic Black:** 13.0%
- **Hispanic or Latino:** 32.2%
- **Asian:** 1.5%
- **Did not provide:** 0.01%
- **Other:** 4.9%

TOTAL ADULT OUTPATIENT POPULATION

- **Non-Hispanic White:** 56.6%
- **Non-Hispanic Black:** 14.7%
- **Hispanic or Latino:** 24.8%
- **Asian:** 1.4%
- **Did not provide:** 0.1%
- **Other:** 2.4%

TOTAL OUTPATIENT POPULATION

- **Non-Hispanic White:** 53.1%
- **Non-Hispanic Black:** 14.1%
- **Hispanic or Latino:** 27.9%
- **Asian:** 1.4%
- **Other:** 3.4%
- **Did not provide:** 0.04%

PEDIATRIC INPATIENT POPULATION

- **Non-Hispanic White:** 61.7%
- **Non-Hispanic Black:** 9.5%
- **Hispanic or Latino:** 21%
- **Asian:** 1.7%
- **Did not provide:** 2.4%
- **Other:** 3.7%

ADULT INPATIENT POPULATION

- **Non-Hispanic White:** 76.3%
- **Non-Hispanic Black:** 8.0%
- **Hispanic or Latino:** 10.4%
- **Asian:** 1.1%
- **Did not provide:** 2.5%
- **Other:** 1.7%

TOTAL INPATIENT POPULATION

- **Non-Hispanic White:** 73.9%
- **Non-Hispanic Black:** 8.3%
- **Hispanic or Latino:** 12.2%
- **Asian:** 1.2%
- **Did not provide:** 2.5%
- **Other:** 1.9%

Languages Spoken

The overwhelming majority (86%) of Rhode Island Hospital's inpatients speak English as their primary language, with 8% speaking Spanish and 2% speaking Portuguese. Among ambulatory/surgery patients, 91% speak English as their primary language, while 7% speak Spanish and 1% speaks Portuguese. Slightly over eighty percent (82%) of Emergency Department patients speak English as their primary language, with 16% citing Spanish and 1% Portuguese. Other languages spoken, in smaller percentages, include Cambodian, Creole, Cape Verdean, Russian, French, Arabic, Greek, Cambodian, Korean, Mandarin, Cantonese, Vietnamese, Laotian, Tagalog, Khmer and Thai.

A Broader Definition of Community

Rhode Island Hospital and its Hasbro Children's Hospital serve the entire state of Rhode Island as well as border communities in Massachusetts. Rhode Island's compact, densely populated geography – the state's 1,045 square miles are home to just over 1 million people, according to the 2010 census – facilitates mobility among communities. Finally, cross-institutional collaboration and referral is fostered among Lifespan member hospitals for a range of services, including but not limited to oncology, pediatric services, trauma care, and surgery. For these reasons, the community surveyed under Rhode Island Hospital's CHNA belongs to the Providence-Warwick, RI-MA Metropolitan New England City and Town Area (NECTA) – defined by the Office of Management and Budget in February 2013.^{xlviii} This area includes Providence County, Bristol County, Kent County, six of the nine towns in Washington County, and all six towns in Newport County.

Objectives and Methodology

Between September 2011 and May 2013, in order to gain greater insight into the health status and health care needs of the people served by Rhode Island Hospital and its Hasbro Children's Hospital, a community health needs assessment (CHNA) was conducted by Lifespan, the healthcare system of which the hospital is a member. The CHNA was conducted concurrently and collaboratively with those of the other three hospitals that are also Lifespan members, with the goal of maximizing efficiency and impact – in both data collection and crafting implementation plans – by creating a rich reservoir of local and statewide data and leveraging synergy across institutions.

The goals of Rhode Island Hospital's Community Health Needs Assessment were:

- **To enhance the hospital's perspective on the healthcare needs of its community**
- **To establish a baseline data set and analysis upon which future work can build**
- **To provide a resource for individuals and organizations interested in health status of the community served by Rhode Island Hospital/Hasbro Children's Hospital**
- **To inform creative discussions and collaborations to improve county health status**
- **To meet the requirements of the Patient Protection and Affordable Care Act, which calls for nonprofit hospitals to periodically assess the health needs of people living in their service area**

The CHNA encompassed intensive data collection and analysis, as well as qualitative research in the forms of interviews with and surveys of more than 100 internal and external stakeholders, including hospital-based physicians, nurses, social workers, administrators and other professionals, and community-based stakeholders representing constituencies served by Rhode Island Hospital and Lifespan's three other member hospitals.

Methodology

The CHNA process launched in September 2011 with the establishment of a project Steering Committee which evolved into a CHNA Executive Team consisting of the system's Chief Financial Officer, Senior Vice President of Human Resources, Senior Vice President of External Affairs, and Vice President of Community Relations. The Executive Team guided the project's strategic planning and oversaw implementation of the project's multiple phases. Rhode Island Hospital's leadership team shaped the CHNA by recommending institutional and community leaders for participation, offering observations about community need, and providing insight about existing and planned programs.

The data collected during the CHNA derive from a wide range of sources. Quantitative data was compiled largely at the state and county levels from public data sources, with some internal utilization data used where applicable. Qualitative data consists of: 1) interviews completed with both internal (i.e. hospital- and Lifespan-based); 2) nearly two dozen key informant interviews with community leaders, representing an array of constituencies; and 3) a Community Stakeholder Survey of 54 organizations statewide.

Quantitative Data

In fall 2011, on behalf of Rhode Island Hospital and its other member hospitals, Lifespan consulted with TWOBOLT, a Rhode Island-based firm with expertise in marketing strategy, execution, and analytics, to create a Needs Assessment Profile based on quantitative data from secondary data sources. Based on a review of many other community health needs assessments completed by hospitals, health departments, and community-based organizations nationwide, approximately two-dozen health and social issues were identified as areas of focus. The following sources of data were identified by either TWOBOLT or Lifespan as relevant sources of information for the CHNA:

- **2011 Kids Count Rhode Island Fact Book**
- **RI Department of Health: The Health of RI Non-Metropolitan areas 2011**
- **Kaiser Family Foundation, State Health Facts, 2011**
- **2010 United States Census**
- **2010 American Community Survey**
- **2009, 2010, 2011 Behavioral Risk Factor Surveillance System (BRFSS)**
- **2010 Burden of Diabetes Report**
- **2010 Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS)**
- **2010 National Cancer Institute: State Cancer Profiles**
- **2010 Substance Abuse and Mental Health Services Administration, *Results from the 2009 National Survey on Drug Use and Health: Mental Health Findings***
- **2011-12 National Survey of Children's Health, the United States Department of Health and Human Services, Maternal and Child Health Bureau**
- **2009-10 National Survey of Children with Special Health Care Needs, the United States Department of Health and Human Services, Maternal and Child Health Bureau**

Most secondary data collection was completed by May 2012. In February 2013, at Lifespan's request, the Rhode Island Department of Health released updated, not-yet-released 2011 Behavioral Risk Factor Surveillance System (BRFSS) data for 45 key variables, representing a range of health and social domains including access to care, physical activity, cancer incidence, asthma hospitalization rates, fruit and vegetable consumption, and demographic data. The updated data was requested because of changes made in the 2011 BRFSS survey ranging from weighting methodologies, sampling that included landline and cell phone users, and changes in questions being asked. This new data would allow Lifespan's member hospitals to establish more accurate baselines for future CHNAs.

Qualitative Data

Interviews and Survey

Between August 2012 and May 2013, feedback was elicited via interviews or survey from more than 100 individuals or organizations – many representing minority and underserved communities – statewide:

Stakeholder Interviews

The CHNA encompassed 64 interviews with internal and external stakeholders:

- **40 Internal Interviews (See Appendix I)**

Interviews with statewide experts, including primary care physicians, emergency medicine physicians, oncologists, social workers, epidemiologists, nurses, hospital executives, community health workers, community liaisons, data managers and other professionals. Many of these professionals sit on boards of community-based organizations, run community health programs, or have direct ties or affiliations with groups within the communities served by Rhode Island Hospital and its Hasbro Children's Hospital. Others are experts in their fields, with many serving as faculty members of Warren Alpert Medical School of Brown University and Brown University School of Public Health. Lifespan-based experts are also well-represented on the policy level as consultants to state departments and panels charged with various aspects of public health.

- **24 Key Informant Interviews (See Appendix II)**

Interviews with leaders of organizations addressing a wide range of issues and populations – including historically underserved communities, such as minority populations, children and youth, immigrant and refugee populations, and leaders of organizations with specific interest in or expertise about key issues such as obesity, cancer and asthma. In a few cases, organizations submitted a completed questionnaire in lieu of participating in an interview. Leaders of organizations with a statewide focus on policy, advocacy and social service provision, and a broad range of social issue content areas were also interviewed. A standard format and questionnaire was used for each interview.

Community Stakeholder Survey

To ensure representation from a broad cross-section of the community, a statewide survey of 54 key community stakeholders was conducted:

- **54 Community Stakeholders (See Appendix III)**

Those surveyed included members of medically underserved, low-income, and minority populations in the community; representatives of organizations that had knowledge, information or relevant to the health needs of the community (including the Brown University School of Public Health, Warren Alpert Medical School of Brown University, the Economic Progress Institute, the United Way, and others); and representatives of the Rhode Island Department of Health. The survey was a 19-question instrument designed to elicit information about the general health and social needs of the community. Over 75% of those surveyed self-reported that they serve constituencies spanning the entire state of Rhode Island and/or the entire state of Rhode Island with the addition of southeastern Massachusetts. (See *Appendix IV for survey instrument*). Survey results are presented in this report in both the aggregated results (all stakeholders) and for organizations stating that their membership was served by Rhode Island Hospital and its Hasbro Children's Hospital.

Social Determinants of Health

Every comprehensive assessment of a community's health needs must begin with a review of its *social determinants of health* – that is, factors and resources that influence the health status of communities and individuals. These factors encompass the full experience of people's lives, from where they live and work (including employment status), to metrics measuring income, education, and housing and food security.

Socioeconomic profile of Providence, Rhode Island

About half of all patients treated at Rhode Island Hospital and its Hasbro Children's Hospital (54% of adult inpatient admissions and 46% of pediatric admissions) come from Rhode Island's urban core, with about one quarter of all admissions coming from the city of Providence.

Providence's population increased slightly from 2000 – when it was recorded at 173,618^{xlx} – to 2010, when it was recorded at 178,042. The growth trend continues, with population placed at 178,432 in 2012.^l Nearly 17% of Rhode Island's 1,052,567^{li} residents live in Providence. The median age in the city of Providence was 28.5 in 2010,^{lii} which is much younger than the statewide median age of 39.4.^{liii} Only 8.7% of Providence's population is over the age of 65,^{liv} compared to 14.4% of the population statewide. Rhode Island has an older population when compared to the nation as a whole.^{lv} The median age in the United States in 2010 was 37.2 and only 13.1% of the population was over age 65.^{lvi}

Providence is a “majority-minority” city.^{lvii} According to the 2010 United States Census, 93.5% of the population identified as “one race”; of this population, 49.8% was white; 16% percent were Black or African-American^{lviii} (compared to 5.6% statewide^{lix}); 38.1% was Hispanic or Latino^{lx}; and 6.4% were Asian.^{lxi} According to 2011 American Community Survey data, 29.4% of the city's population was foreign-born, with 66.2% of the foreign-born population coming from Latin American countries.^{lxii} Slightly more than half (52.1%) of all households in Providence speak English-only at home.^{lxiii} About 48% of all Providence households speak a language other than English at home, with 34.9% of all Providence households speaking Spanish.^{lxiv}

In 2011, the median household income in Providence was \$38,922,^{lxv} which is significantly lower than the statewide median income of \$55,975.^{lxvi} The per capita income in Providence city was \$21,628,^{lxvii} which again was lower than the statewide per capita income of \$29,865.^{lxviii} Twenty-three percent of all Providence households lived on an annual income of under \$15,000 a year,^{lxix} which was considerably more than the 15.4% of all households statewide that lived under \$15,000 annually. Nearly one-quarter (23.1%) of all households in the city of Providence received Supplemental Nutrition Assistance Program (SNAP) benefits in the past year,^{lxx} which was over double the percentage of households statewide (10.7%) that received SNAP benefits.^{lxxi} (Nationally, the median income in the United States in 2011 was \$52,762; per capita income was \$27,915; 12.3% of all U.S. households lived under \$15,000 annually; and 10.2% of households received SNAP benefits in the past year.^{lxxii})

Below is a breakdown of economic indicators for the state and the key cities in Providence County, from which Rhode Island Hospital draws the largest concentration of its patients:

Rhode Island^{lxxiii} **\$29,865 income per capita**
\$55,975 median household income
14.3% of residents below poverty level
10.7% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
15.4% of households reported income of less than \$14,999
9.5% of households reported income of more than \$150,000

Providence^{lxxiv} **\$21,628 income per capita**
\$38,922 median household income
27.7% of residents below poverty level
23.1% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
23.0% of households reported income of less than \$14,999
6.5% of households reported income of more than \$150,000

Pawtucket^{lxxv} **\$21,753 income per capita**
\$39,628 median household income
19.4% of residents below poverty level
18.9% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
19.9% of households reported income of less than \$14,999
2.9% of households reported income of more than \$150,000

Cranston^{lxxvi} **\$28,496 income per capita**
\$58,422 median household income
9.7% of residents below poverty level
9.1% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
12.2% of households reported income of less than \$14,999
8.4% of households reported income of more than \$150,000

Warwick^{lxxvii} **\$31,596 income per capita**
\$59,973 median household income
7.5% of residents below poverty level
5.9% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
10.6% of households reported income of less than \$14,999
7.6% of households reported income of more than \$150,000

Central Falls^{lxxviii} **\$15,235 income per capita**
\$32,759 median household income
27.7% of residents below poverty level
29.5% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
26.4% of households reported income of less than \$14,999
1.0% of households reported income of more than \$150,000

East \$28,813 income per capita
Providence^{lxxix} \$49,408 median household income
10.0% of residents below poverty level
10.0% reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in previous 12 months
14.5% of households reported income of less than \$14,999
6.0% of households reported income of more than \$150,000

According to HousingWorks RI, a statewide affordable housing advocacy group, a household income of \$41,200 is needed to make average monthly rent for a two-bedroom in Providence (\$1,030) affordable.

Employment

According to the Bureau of Labor Statistics, the unemployment rate as of July 2013 in the Providence area was 10.2% -- but 12.7% in Providence and 12.6% in Fall River, the closest city in Massachusetts.^{lxxx} Rhode Island's statewide unemployment rate is the fourth highest in the nation, at 8.9%, down from 10.6% in 2012.^{lxxxi} The New England average, as of May 2013, was 6.8%, with an unemployment rate in Connecticut at 8.0%, Maine 6.9%, Massachusetts 6.4%, New Hampshire 5.5%, and Vermont 4.0%.^{lxxxii}

A more nuanced view of unemployment in Rhode Island may yield even greater insight into the economic challenges facing the state's residents. According to the Rhode Island Department of Labor and Training, Rhode Island's rate of *labor underutilization* (including all unemployed people, "discouraged" workers and other marginally attached workers, and all people who are unemployed for economic reasons) was 15.9% in June 2013.^{lxxxiii}

Childhood Poverty in Rhode Island

Just under fifteen percent (14.8%) of Rhode Island families with children under 18 years of age, and 15.0% of families with children under 5 years of age, have lived below the poverty level over the past 12 months, compared with about nine percent (8.9%) of all families in the state.^{lxxxiv}

In 2012, the federal poverty line (FPL) issued by the United States Census Bureau for a family of three with two children was \$18,498, increasing to \$23,283 for a family of four with two children.^{lxxxv} (The FPL is set nationwide and does not take into account regional variations in cost of housing, transportation, child care, and other expenses.) According to the Economic Progress Institute, the cost of meeting the basic needs of a single-parent family with two children in Rhode Island is \$49,272 and would require an annual earned income of \$57,540.^{lxxxvi} Estimated annual expenses for a two-parent family with two children are \$54,024, requiring an annual earned income of \$61,980.^{lxxxvii}

Nearly twenty percent (19.4%) of Rhode Island children under the age of 18 lived in households with incomes below the FPL between 2009 and 2011.^{lxxxviii} For the period of 2008-2011, Rhode Island ranked last (6th) out of states in New England in term of children in poverty and 27th in the nation (1st is best, 50th is worst).^{lxxxix}

Child poverty is heavily concentrated in Rhode Island's four core cities, where the poverty rate is significantly greater than the statewide rate of 19.4%: Central Falls (36.9%), Pawtucket (29.4%), Providence (37.3%), and Woonsocket (35.8%). More than 25,700 children lived in poverty in these four cities, with 15,428 children living in poverty in Providence alone.^{xc} In East Providence, 1,625 children under the age of 18 live in poverty.^{xcii}

Nearly 40% (38%) of Rhode Island's black children under the age of 18 live in poverty, compared to 37% of Hispanic children, 24% of Asian children, and 13% of white children.^{xciii} However, given Rhode Island's large white population—81.4% of Rhode Islanders reporting they that are of “one race” report being white^{xciii}—most children living in poverty in the state are white. Between 2009 and 2011, almost half of all poor children (approximately 20,800) were white, 16% were black, 4% were Asian, 1% were Native American, 21% were another race, and 8% were two or more races.^{xciv} Notably, 39% of all children living in poverty in Rhode Island were Hispanic. (Hispanic children are included in several race categories, as the U.S. Census asks separately about race and ethnicity).^{xcv}

Rhode Island has the second highest participation rate in the Supplemental Nutrition Assistance Program (SNAP) – formerly known as the Food Stamp Program – of all of the New England states, behind only Maine.^{xcvi} SNAP provides an average monthly subsidy of \$382 to families in Rhode Island, with a family of three required to have an income of no more than \$36,131 (185% of the federal poverty level) to qualify for the program. In 2012, SNAP benefits were provided to 66,924 Rhode Island children and 107,255 adults—up nearly 84% since 2005, when only 35,168 children were enrolled.^{xcvii}

In Rhode Island, 35% of all low-income children participated in the school breakfast program as of October 2012.^{xcviii} During the 2012-2013 school year, all schools in Central Falls, Cranston, Pawtucket, Providence and Woonsocket—in addition to selected other schools and charter schools—offered a universal (free) school breakfast. Among schools offering universal school breakfast, 44% of low-income students participated in the school breakfast program – double the percentage (22%) of low-income students in schools without a universal program.^{xcix} Just under half (46%) of all low-income children in Providence participated in school breakfast.^c

Findings

Self-reported data included in the 2011 Behavioral Risk Factor Surveillance System (BRFSS) surveys reveal 82.6% of Rhode Island adults ^{ci} describing their health as “excellent, very good or good,” while the remainder (17.4%) described their health as fair or poor. (Nationwide, slightly fewer individuals (16.9%) described their health as fair or poor.^{cii}) Nearly 62% of Rhode Island adults^{ciii} — and 63.2% of adult residents of Providence County^{civ} — reported no physically unhealthy days per year, while 86.20% of Rhode Island adults — and 88.16% of Providence County adults^{cv} — reported fewer than 13 “physically unhealthy days” per year.

According to 2011-2012 National Survey of Children's Health data, 86.8% of Rhode Island children were described as having “excellent or very good health,” compared to 84.2% of children nationwide, 88.7% of children in Massachusetts and 85.8% of children in Connecticut.^{cvi} While fewer children in Rhode Island reported fair/poor health status (3.1%) than nationwide (3.2), the state's rates were higher (worse) than in neighboring Massachusetts (2.0%) and Connecticut (1.9%).^{cvii}

Data review and insights from clinicians, researchers, community stakeholders, and others reveal a community where economic stress is evident – with potential and real effects on health status.

Compared with 14.3% of all Rhode Islanders, about 27.7% of Providence residents, 19.4% of Pawtucket residents, 27.7% of Central Falls residents, and 22.2% of Woonsocket residents live below the poverty level.^{cviii} These areas also have high rates of Supplemental Nutrition Assistance Program (SNAP) participation: Providence (23.1%); Pawtucket (18.9%); Central Falls (29.5%); and Woonsocket (20.0%), compared with a statewide SNAP participation rate of 10.7%.^{cix}

As a major employer and a source of local employment for skilled health care professionals, Rhode Island Hospital is a positive force for economic recovery. Employing 5,993 full-time employees (FTEs), the hospital has approximately 426 full-time house staff, a nursing staff of 1,302 and more than 4,265 other employees. The hospital also has 1,819 affiliated physicians. Rhode Island Hospital recognizes that health care employment is built on the kind of career ladders that provide steady employment, health insurance and other benefits, and mobility for workers of virtually all skill levels, and takes its responsibility as an economic engine very seriously – for instance, participating in Lifespan initiatives to seek and secure competitive workforce grant funding to provide residency rotations, advanced training, and possible employment for unemployed and underemployed newly licensed registered nurses and unemployed Rhode Islanders interested in pursuing employment as certified nursing assistants (CNAs).

As a key player in the state's innovation hub, Lifespan also leverages the economic potential of research underway at Rhode Island Hospital and its other member teaching hospitals by making strategic investments in recruitment, research infrastructure, and technology commercialization.

Health issue areas of concern

Rhode Island Hospital's status as a major employer and economic engine is, ultimately, simply an important secondary benefit of its role as a provider of essential hospital-based health services. The CHNA identified five key health issue areas of concern within the hospital's scope of service and expertise that appear to be of critical need in the communities we serve:

▪ Access to Care

Access to health and social services is critical to improving the health status of individuals and communities, and various challenges to access (i.e. cost, transportation, lack of health insurance, and health literacy) were cited as top concerns by community stakeholders – along with related challenges of poverty, lack of employment, and language/cultural barriers. According to 2011 BRFSS data, 17.1% of Providence County residents (compared to 14% of all Rhode Islanders) reported not having access to any type of health insurance – the highest rate of any county in the state.^{cx} About six percent (5.9%) of Rhode Island children are uninsured^{cxⁱ} and 6.2% lack any usual source of care when they are sick.^{cxⁱⁱ} Nearly six percent of Rhode Island children are estimated to have one or more health care needs that are unmet,^{cxⁱⁱⁱ} a number that rises to nearly 20% for children with special health care needs.^{cx^{iv}} More than ten percent come from families whose families could not afford to pay their medical bills.^{cx^v}

▪ Asthma

In 2010, Rhode Island had the second highest self-report rate in the United States for current asthma prevalence among adults, and the third highest self-reported lifetime asthma prevalence rate. There are disparities within the state in terms of geography (Providence County has the highest lifetime asthma prevalence rate) as well as income (households with incomes less than \$25,000 have increased incidence). It is estimated that 37,250 Rhode Island children (17.1%) have been diagnosed with asthma at some point in their lifetime, compared to 14.5% of children nationwide.^{cx^{vi}} Approximately 23,700 children in Rhode Island (10.9% of the state's children) currently have asthma – compared with 8.8% of children nationwide.

▪ Cancer

Cancer is the second-leading cause of mortality in Rhode Island, as it is nationwide. Rhode Island has one of the highest cancer incidence rates in the nation. In 2009, the state's age-adjusted cancer incidence rate (491.4 cases per 100,000) was the fourth highest in the United States, but the state was 26th nationally for cancer mortality. The leading types of cancer incidence in Rhode Island were breast cancer (135.2 per 100,000), prostate cancer (134.8/100,000), lung cancer (72.2/100,000), and colon cancer (41.9/100,000).

▪ Healthy Weight

Heart disease is the leading cause of death in Rhode Island, as it is in the United States.^{cx^{vii}} Maintaining healthy weight is a core defense against an array of cardiac conditions, in addition to diabetes, cancer, and other diseases as well as mobility issues that can contribute to injury and disability. Providence County residents had higher rates of obesity, diabetes, high blood pressure and cardiovascular disease compared to statewide prevalence rates.^{cx^{viii}} The obesity rate among children and adolescents nationwide (ages 2 to 19) increased by 69%—from 10.0% to 16.9%—between 1988-1994 and 2009-2010.^{cx^{ix}} In Rhode Island, 15.1% of children aged 10-17 were overweight and 13.2% were obese.^{cx^x} Nearly 15.5% of children who entered kindergarten in the 2011-2012 school year were obese, far exceeding the Healthy People 2020 goal of 9.6% for children between the ages of two and five.^{cx^{xi}}

- **Mental Health**

The physical, social, and economic benefits of sustaining mental health cannot be overstated, and community representatives surveyed routinely cited access to mental health services as a top concern. Beyond its destructive impact on individual lives, undiagnosed and/or untreated mental illness erodes productivity, increases addiction, violence, and suicide, and strains the social fabric of a community. The percentage of Rhode Islanders coping with mental illness far exceeds the national average, as evidenced by the fact that the state has the highest rate of *any mental illness* in than nation.^{cxxii} Rhode Island has the second-highest rate of illicit drug use in the United States.^{cxxiii}

Rhode Island Health Status at a Glance: Key Metrics for Children and Adults

	US	RI	MA	CT	Providence County
Access to Care					
% Without any health coverage	17.9 ^{cxxiv}	14.1 ^{cxxv}	6.7 ^{cxxvi}	12.5 ^{cxxvii}	17.1 ^{cxxviii}
% Adults (18-65) Uninsured	21.3 ^{cxxix}	16.6 ^{cxxx}	7.8 ^{cxxxi}	14.8 ^{cxxxii}	
% Not seeing doctor due to cost	14.6 ^{cxxxiii}	12.3% ^{cxxxiv}	6.7 ^{cxxxv}	9.6 ^{cxxxvi}	13.0% ^{cxxxvii}
% Children (0-18) uninsured	9.6 ^{cxxxviii}	5.9 ^{cxxxix}	3.0 ^{cxl}	6.0 ^{cxli}	
ED visits per 1,000	411 ^{cxlii}	470 ^{cxliii}	481 ^{cxliv}	464 ^{cxlv}	
Primary Care Physicians: Patient Ratio	2,300:1 ^{cxlvi}	1,116:1 ^{cxlvii}	987:1 ^{cxlviii}	1,223:1 ^{cxlix}	1,139:1 ^{cl}
Asthma					
% Adults (18+) ever told they have asthma ¹	13.5 ^{clii}	16.4 ^{cliii}	15.3 ^{cliii}	15.3 ^{cliv}	17.6 ^{clv}
% Adults Current Asthma	8.6 ^{clvi}	10.9 ^{clvii}	10.4 ^{clviii}	9.2 ^{clix}	
% Child Current Asthma ^{clx}	8.8	10.9	10.2	11.0	
% Child Asthma Rated as Moderate/Severe ^{clxi}	2.5	3.5	2.3	3.5	
Cancer²					
Incidence					
All cancers	451.4	491.4	470.3	503.1	526
Bladder	20.4	29.9	24.1	27.2	28.9
Female Breast	122.9	135.2	130.3	138.9	136.8
Cervix	7.9	6.3	5.5	6.2	9.9
Uterus	25	25.5	29.3	30.7	25.8
Colon & Rectal	42.3	41.9	40.6	44.2	48.1
Lung and Bronchus	64.1	72.1	66.5	65.3	77.3
Melanoma	24.6	22.4	25.2	30.3	29.7
Prostate	137.4	134.8	131.8	158.9	171.5
Mortality					
Deaths/100,000	173.1	174.5	174.6	167.3	
Lung & Bronchus	48.5	48.9	48.6	44.1	
Prostate Cancer	33.0	22.5	21.7	22.4	
Breast Cancer/100,000	22.2	20.6	22.2	21.6	
Colon Cancer	15.7	15.6	15.1	13.3	
Pancreas	10.8	10.1	11.0	12.5	
Ovary	7.8	6.9	7.8	6.8	
Leukemia	7.0	6.8	6.6	7.2	
Liver	5.8	6.3	6.1	5.0	
Non-Hodgkin Lymphoma	6.3	5.0	5.5	5.9	
Uterus	4.2	3.7	4.3	4.9	

¹ Data for the United States, Massachusetts and Connecticut is from 2010 BRFSS; Data for Rhode Island and Providence County is from 2011 BRFSS.

² All national and state cancer data is from the National Cancer Institute's *State Cancer Profiles*.

Rhode Island Health Status at a Glance: Key Metrics for Children and Adults

Screening	US	RI	MA	CT	Providence County
% Reported Mammogram in Past Year (40+)	75.3	81.4 ³	83.6	80.3	
% Reported Pap smear in Past 3 Years (21-65)	86.7	90.3	93.0	91.7	

Healthier Weight

% Overweight	35.7 ^{clxii}	37.1 ^{clxiii}	36.6 ^{clxiv}	35.2 ^{clxv}	36.8 ^{clxvi}
% Obese	27.8 ^{clxvii}	25.4 ^{clxviii}	22.7 ^{clxix}	24.5 ^{clxx}	26.6 ^{clxxi}
Age-adjusted Heart Disease Death Rate ⁴ ^{clxxii}	179.1	167.1	150.0	155.7	
% Diagnosed with Diabetes ⁵	8.7 ^{clxxiii}	8.5 ^{clxxiv}	7.4 ^{clxxv}	7.3 ^{clxxvi}	9.2 ^{clxxvii}
% Overweight High School Students ^{clxxviii}	14.7	14.9	14.6	14.1	
% Obese High School Students ^{clxxix}	12.0	10.8	9.9	12.5	

Mental Health

% Adults reporting any mental illness ^{clxxx}	19.83	21.10	19.72	18.61	
% Adults reporting serious mental illness ^{clxxxi}	4.99	5.06	5.42	4.75	
% Adults, major depressive episode, past year ^{clxxxii}	6.7	6.88	6.91	6.42	
% Adults with serious thoughts of suicide ^{clxxxiii}	3.75	4.13	3.95	3.62	
Mortality rate from suicide (per 100,000)	12.1 ^{clxxxiv}	12.3 ^{clxxxv}	12.5 ^{clxxxvi}	9.4 ^{clxxxvii}	11.8 ^{clxxxviii}
% Alcohol dependence or abuse, past year ^{clxxxix}	6.78	9.11	8.4	7.30	
% Illicit Drug Use in the Past Month ^{clxxx}	8.82	14.52 ⁶	11.55	9.1	

³ Rhode Island has the second highest (best) rate of mammograms for women (40+) in the nation.

⁴ The age-adjusted death rates are per 100,000 people. Rhode Island's heart disease death rate, not adjusted for age, was 220.6 deaths per 100,000 people, which was higher than the national rate of 193.6 per 100,000.

⁵ Rates for the United State, Connecticut and Massachusetts are from 2010 BRFSS data; Data for Rhode Island and Providence County is from 2011 BRFSS.

⁶ Rhode Island has the second highest illicit drug use rate in the country, behind only Vermont.

Access to Care

Through the Community Stakeholder Survey conducted for the Community Health Needs Assessment (CHNA), community leaders and organizations with members served by Rhode Island Hospital identified various facets of access to health care services as the most significant health issues facing the constituencies they serve. The health care issues most frequently cited were: *access to health insurance (77.1%); access to primary care (74.3%); access to mental health services (74.3%); affordability of prescription medicine (68.6%); affordability of health services (65.7%); access to social services (62.9%); health literacy (62.9%); and access to specialty care (54.3%).*

At the aggregate level, survey respondents across the state also indicated that issues related to access to care are the most significant concerns to their members: *Access to mental health services* was cited as a top concern by 75.5% of respondents; *access to health insurance* by 73.6%; *access to primary care* by 71.7%; *affordability of prescription medication* by 69.8%; *affordability of health services* by 67.9%; *health literacy* by 62.3%; *access to social services* by 58.5%; and *access to specialty care* by 54.7%.

Access to Care: Healthy People 2020 and Key Data

The Healthy People 2020 Objectives (HP2020) state that having access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone.^{cxci} An individual or community's access to health care can impact overall physical, social and mental health status; quality of life; prevention of disease and mortality; and life expectancy.

The Healthy People 2020 Objectives are focused on four key components of access to care:

- **Coverage**
- **Services**
- **Timeliness**
- **Workforce**

According to the HP2020 Objectives, having adequate access to health services means that a patient is able to 1) gain entry into the health care system, 2) access healthcare locations where the services he or she needs are provided, and 3) find a health care provider the patient can trust and with whom he or she can communicate. Predictors of access to health care include: health insurance, household income level, usual source of primary care, use of emergency rooms, and immunizations. The uninsured are more likely to report no usual source of care and use the emergency room for non-emergency care.

According to 2011 Behavioral Risk Factor Surveillance System (BRFSS) data, 14.1%^{cxcii} of all Rhode Island adults reported not having access to health insurance. Providence County had the highest rate of

uninsured individuals at 17.13% while Washington County had the lowest rate (8.4%) of uninsured residents.^{ccxiii}

Because access to health insurance affects how patients access providers, the BRFSS survey asked individuals whether or not they had one person that they thought of as their health care provider and personal doctor. According to this metric, Rhode Islanders fared significantly better than the nation as a whole. On the national level, 21.93%^{ccxiv} of patients reported that they had no regular health care provider, compared with 14.0%^{ccv} of Rhode Islanders. At 14.7%,^{ccvii} Providence County had the highest rate in Rhode Island of individuals responding that they had no regular health care provider.

About six percent (5.9%) of Rhode Island children are uninsured^{ccviii} and 6.2% lack any usual source of care when they are sick.^{ccix} Nearly six percent of Rhode Island children are estimated to have one or more health care needs that are unmet,^{ccix} a number that rises to nearly 20% for children with special health care needs.^{cc} More than ten percent come from families whose families could not afford to pay their medical bills.^{cci}

The state has the tenth best (lowest) rate of uninsured children in the nation.^{ccii} Nationwide, 9.6% of children in the U.S. were uninsured.^{cciii} In Rhode Island, 94.1% of children under the age of 19 had health insurance between 2009 and 2011 – leaving only 15,382 children (5.9% of all children in the state) uninsured.^{cciv} However, recent trends in both private insurance rates and cuts in state-funded insurance for children cast doubt on how well children, especially low-income children, in the state will be insured in the future – even with the implementation of provisions of the Affordable Care Act.

One reason for the high rate of insurance among children in Rhode Island is that Medicaid and the Children's Health Insurance Program (CHIP) provide comprehensive health care coverage to low-income children and families who qualify based on family income. In 2012, RItte Care/RItte Share—the managed care health insurance program in Rhode Island—had an enrollment of 117,885.^{ccv} Approximately 72% (84,837) of those who qualified for enrollment were children.^{ccvi} Of these children, 28,857 lived in Providence.^{ccvii}

Of the 15,382 children who were uninsured, approximately three-quarters (11,400) qualified for RItte Care coverage based on their family incomes but were not enrolled.^{ccviii} Thirty-five percent of children (5,435) under the age of 19 without insurance lived in families with incomes of less than 100% of the poverty line while 27% (4,082) lived in families with incomes between 100% and 174% of the poverty line.^{ccix} Likely reflecting the effects of unemployment and loss of employer-based coverage during the recession, the number of children enrolled in private, employer-sponsored health insurance between 2008 and 2011 decreased by 17% –from 73.1% to 60.6%.^{ccx}

The FY2014 budget enacted by the Rhode Island General Assembly dropped about 6,500 low-income

individuals from RItE Care,^{ccxi} with the expectation that those families would be expected to purchase insurance through the health insurance exchanges that will be established in 2014 as mandated under the Affordable Care Act. Under the ACA, these families will receive some government subsidies to purchase insurance; however, many advocates believe that forcing low-income families to pay for monthly premiums and medical expenses out-of-pocket could be cost prohibitive.

The 2011-2012 National Survey of Children's Health (NSCH)—sponsored by U.S. Department of Health and Human Services—found that 5.8% of children in Rhode Island (approximately 12,620 children) had one or more unmet needs for medical, dental or mental health services during the past 12 months, compared to 6.7% of children nationwide.^{ccxii} While Rhode Island children fared better than children nationwide in terms of the percent with a usual source of care when they are sick or need advice—6.2% compared to 8.6%^{ccxiii}—they fared worse than children in neighboring Massachusetts, where only 5.0% children respectively had no usual source of care.^{ccxivccxv}

Racial disparities were prominent with respect to issues related to access to health services. Hispanic children were the most likely to not have a source of usual care (16.3%), followed by black children (6.9%) and white children (2.1%).^{ccxvi ccxvii} Not having access to a usual source of health care could impact preventive care utilization rates, as 10% (21,637) of children in Rhode Island had no visit with a doctor, nurse, or other health care provider for preventive medical care such as a physical exam or well-child checkup within the past year.^{ccxviii} White children were much less likely to have no preventive medical care visits (7.2%) when compared to Hispanic children (14.8%) and Black, non-Hispanic children (15.3%).^{ccxix}

Fewer (2.1%) of Rhode Island children have difficulty getting referrals to a health care provider when needed, which was lower than the national rate (3.5%).^{ccxx} However, there was again significant variation between races, as only 0.9% of white children had problems getting referrals compared to 3.6% of Hispanic children, 5.1% of Other, non-Hispanic children, and 5.4% of black children (which was significantly higher than the national rate among black children at 3.5%)^{ccxxi}. With respect to specialty care, 5.9% of Rhode Island children—and 6.4% of children nationally—were estimated to have received or needed specialist care but had problems getting specialist care.^{ccxxii} Again, children who were White, non-Hispanic, had lower rates (4.6%) of having problems getting specialist care in Rhode Island than Hispanic children (8.4%) and Black, non-Hispanic children (13.4%).^{ccxxiii}

There is significant need for access to mental health services among Rhode Island's children. The NSCH estimated that 34% (6,430) of children in the state needed, but did not get, access to mental health services.^{ccxxiv} While Rhode Island fared better than the national rate (39%), the state had just the fourth best rate of all six New England states followed only by Connecticut (35.0%) and Massachusetts (35.1%);

Vermont (21.1%) and Maine (21.2%) had the second and third best rates nationwide.^{ccxxv} The survey again found significant variations between race, as 75% of black, non-Hispanic children (565) and 74% of Hispanic children (2,833) in Rhode Island needed but did not get mental health services, compared to 17.2% of White, non-Hispanic children (1,901).^{ccxxvi}

Children with special health care needs have disabilities or chronic diseases that require medical, social or educational services beyond the amount required generally by children. The Maternal and Child Health Bureau (MCHB) of the United States Department of Health and Human Services defines children with special health care needs as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”^{ccxxvii} For families with children with special health care needs, having adequate and affordable health insurance coverage for medical care, behavioral health care, and oral health care, is extremely important.

According to the most recent data from the National Survey of Children with Special Health Care Needs (NSCSHCN), 39,170 children (17.3% of all Rhode Island children) had special health care needs in 2010, compared with 15.1% nationwide.^{ccxxviii} The survey estimated that 19.1% of children with special health needs in Rhode Island had unmet needs for specific health care services—compared to 5.8% of children overall, according to the NSCH data—and 5.7% had unmet need for family support services.^{ccxxix} In addition, 20.1% of these children had difficulty getting a referral to specialty health care services, which is nearly ten times the rate (2.1%) of all children in Rhode Island who had difficulty getting a referral; 8.1% either had no usual source of care when sick or relied on the emergency room; and 6.6% had no access to a personal doctor or nurse.^{ccxxx}

Health insurance coverage was also a significant issue. Nearly seven percent (6.7%) of children with special health needs in Rhode Island had no insurance at some point within the past year, 1.7% had no insurance, and 31.3% reported inadequate insurance.^{ccxxxi}

The cost of care was also cited as a barrier to accessing health care services for some individuals. According to BRFSS data compiled by the Kaiser Family Foundation, 12.3%^{ccxxxii} of Rhode Island residents reported that there was a time in the past 12 months that they needed to see a doctor but could not do so because of cost. Nationwide, 14.6%^{ccxxxiii} responded that they could not see a doctor due to cost in the past year, compared to 6.7%^{ccxxxiv} of residents in Massachusetts and 9.6%^{ccxxxv} of Connecticut residents. Data compiled by the Robert Wood Johnson Foundation’s *County Health Rankings and Roadmaps* program indicates that 13.0% of Providence County residents did not see a doctor in the past year due to cost, compared to 10.0% in Kent County and eight percent in Bristol, Newport and Washington Counties.^{ccxxxvi}

However, 2011 statewide BRFSS data provided by the Rhode Island Department of Health for this needs assessment indicates that 15.8% of residents statewide did not see a doctor in the past year because of costs.^{ccxxxvii} In Providence County, 18.0% of residents did not see a doctor in the past 12 months due to cost, compared to 17.2% in Bristol County, 12.7% in Kent County, 12.5% in Newport County and 12.2% in Washington County.^{ccxxxviii}

Patient-to-provider ratios are another way of determining whether or not there are enough physicians, dentists or other health care professionals to meet a community's need.

- **In terms of the ratio of primary care physicians (PCPs) to patients, there are significant disparities among Rhode Island's counties. According to 2011-2012 data from the Health Resources and Services Administration, Providence County had 550 of the state's 943 PCPs.^{ccxxxix} Despite this large number of PCPs, the county's large population gives it a patient-to-provider ratio of 1,139:1 – compared to 1,383:1 in Kent County, 1,218:1 in Newport County, 1,040:1 in Washington County, and 600:1 in Bristol County.^{ccxi ccxlii} It should be noted that each Rhode Island county ratio is below (better than) the estimated average panel size for a primary care physician in the United States (which is about 2,300 patients according to a 2012 study).^{ccxlii}**
- **According to 2011-2012 data from the Health Resources and Services Administration, Providence County had 516 of the state's nearly 715 mental health providers, giving it a patient-provider ratio of 1214:1, which was the best in the state.^{ccxliii} Bristol County ranked second, with a patient-provider ratio of 1,466:1.^{ccxliv} There were 42 mental health providers in Newport County, giving it a rate of one provider for every 1,972 patients, which was the third worst rate in the state.^{ccxlv} Kent County and Washington County had ratios of 2,594:1 and 2,151:1 respectively.^{ccxlvi}**
- **There are again notable disparities in dental care, with trends reversed. Providence County had 347 dentists, giving it a rate of 1186:1, followed by Washington County, which had 62 dentists (a ratio of 2,152:1) and Bristol County, which had the lowest number of dentists (17) in the state, giving it a ratio of 3,123 patients per dentist.^{ccxlvii} Newport County had 72 dentists, giving it the best ratio in the state (1,200:1).^{ccxlviii} Kent County had 112 dentists, giving it the second most favorable rate (1,496:1).^{ccxlix}**

The full impact of the Patient Protection and Accountable Care Act (PPACA) will likely manifest over the next 18 months to two years, as greater numbers of Rhode Island residents are able to access health insurance outside of the traditional model of employer-based coverage. However, the immediate impact on the general health status of the population served by Rhode Island Hospital is unclear.

Community Stakeholder Survey Results

A *Community Stakeholder Survey* was initiated in the spring of 2013. Surveys were sent to community members and organizations served by Rhode Island Hospital and Lifespan's three other member hospitals. Fifty-four organizations responded statewide. Of these organizations, 35 responded that their members are served by Rhode Island Hospital. Key informant interviews were also conducted with nearly two-dozen community and organizational leaders across the state as part of the needs assessment.

Most Significant Health Needs

Rhode Island Hospital Stakeholder Survey Results

Among respondents who reported that their communities or members were served by Rhode Island Hospital and/or its Hasbro Children's Hospital, the Community Stakeholder Survey revealed broad concern around issues relating to access to care and services. Respondents were asked to identify any issue that was of concern to their members and also to list which issues were the three most significant. When asked to identify the health issues of greatest concern in their respective communities, respondents identified the following:

- 1) Access to Health Insurance (77.1%)**
- 2) Access to Primary Care (74.3%)**
- 3) Access to Mental Health Services (74.3%)**

Also identified as being of concern, to a lesser degree, were:

- **Affordability of Prescription Medication (68.6%)**
- **Nutrition (68.6%)**
- **Affordability of Health Services (65.7%)**
- **Access to Social Services (62.9%)**
- **Health Literacy (62.9%)**
- **Access to Specialty Care (54.3%)**

When community stakeholders with members served by Rhode Island Hospital and/or its Hasbro Children's Hospital were asked to list only the three most significant health issues, the top four results were all related to access: *access to mental health Services* (37.1%), *access to primary care* (34.3%), *access to health insurance* (34.3%) and *health literacy* (22.9%).

Statewide Stakeholder Results

The aggregated statewide survey results were similar to the concerns of organizations representing families and individuals served by Rhode Island Hospital and/or its Hasbro Children's Hospital. However, when asked about the most significant issues, the statewide cohort placed greater emphasis on access to mental health services and primary care services:

- 1) Access to Mental Health Services (75.5%)**
- 2) Access to Health Insurance (73.6%)**
- 3) Access to Primary Care (71.7%)**

Other health issues identified as being of notable concern at the aggregate level include:

- **Affordability of Prescription Medication (69.8%)**
- **Affordability of Health Services (67.9%)**
- **Mental Health (67.9%)**
- **Nutrition (67.9%)**

It should be noted that when respondents were asked to list the top three most significant health issues in their communities, the top five issues all related to access to care or mental health: *access to mental health services* (40.4%); *access to primary care services* (38.5%), *access to health insurance* (30.8%); *health literacy* (23.1%) and *mental health* (23.1%).

Most Significant Social Needs

Rhode Island Hospital Stakeholder Survey Results

When asked to identify the most significant social concerns facing the communities they served, economic issues were front and center; 88.6% of respondents with members served by Rhode Island Hospital and/or its Hasbro Children's Hospital cited *unemployment* (which can be directly linked to an individual's or family's access to health insurance, as well as income) as the most significant issue. The second most significant issues among these respondents were *poverty* (80.0%), *affordable housing* (74.3%), *lack of transportation* (74.3%), *education* (65.7%), and *language barriers/limited English proficiency* (51.4%).

Statewide Stakeholder Survey Results

The aggregated statewide results revealed similar trends, with the top three social determinants identified being economic in focus: *unemployment* (84.6%); *poverty* (80.8%); *lack of transportation* (76.9%); and *affordable housing* (75.0%).

Again, these findings are central to how an individual or family accesses health care services. If a patient lacks transportation or is unable to speak the language of healthcare providers, he or she will be less likely to keep appointments, understand and comply with treatment plans developed by care providers, or even to access the health care system at all.

Asthma

In 2010, adults (age 18+) in Rhode Island had the third highest self-reported lifetime asthma prevalence rate (16.7%) in the United States.^{ccl} The average nationwide lifetime prevalence rate was 13.5%.^{ccli} Rhode Island had the second highest rate in the U.S. for current asthma (10.9%) in 2010, compared to the nationwide rate for current asthma of 8.6%.^{cclii} The 2011 BRFSS data shows that the lifetime prevalence rate for Rhode Island adults had decreased slightly, but was still high at 16.4%.^{ccliii}

Racial and income disparities

Significant disparities in asthma prevalence persist at the county level. In 2011, 17.6% of adults in Providence County – the highest rate among Rhode Island’s five counties – reported that they had ever been told that they had asthma.^{ccliv} Kent County had the second highest rate (15.8%), followed by Newport (15.4%), Bristol (14.5%) and Washington (13.9%).^{cclv} Slight differences for lifetime asthma exist between race and ethnicity: Black, non-Hispanic (17%), White, non-Hispanic (16%) and Hispanic (14%).^{cclvi} For current asthma, the rates among Black non-Hispanics and White non-Hispanics were virtually the same (11%) while the rates for Hispanics was lower (9%).^{cclvii}

When stratified for household income, clear differences exist. Lifetime asthma prevalence rates for households with income of less than \$25,000 were 19%, compared to a rate of 15% for households with income of \$25,000 or more.^{cclviii} The trends existed for current asthma prevalence rates, as well: 14% of households with incomes of less than \$25,000 reported current asthma, compared to 10% of households with an income of \$25,000 or more.^{cclix}

Incidence Rising

The 2012 Rhode Island Department of Health Asthma Control Program’s *Measuring Up* report on adults with asthma found that the state’s age-adjusted emergency department utilization rates, for adults presenting principally because of asthma, held steady at about 55 emergency department visits per 10,000 Rhode Island adults from 2005-2009.^{cclx} However, the rate for emergency room visits for adults, when asthma is the *secondary reason*, increased significantly during those years, rising from 89 visits per 10,000 people in 2005 to 133 visits per 10,000 people in 2009.^{cclxi}

Rhode Island’s age-adjusted asthma inpatient hospitalization rates for adults, when asthma is the first reason for hospitalization, stayed relatively the same from 2005-2009 at about 13 inpatient admissions per 10,000 Rhode Island adults.^{cclxii} The age-adjusted asthma inpatient hospitalization rate, when asthma was the secondary reason for the hospitalization, increased slightly from 2005-2009, from 91 inpatient admissions to 100 admissions in 2009. There were marked disparities by geography. The report revealed that the asthma hospitalization rate for the city of Providence (18.9 per 10,000) is nearly twice that for the state (10.6 per 10,000).^{cclxiii}

Children with Asthma

According to 2011-2012 National Survey of Children's Health (NSCH) data, about 37,250 Rhode Island children (17.1%) have been diagnosed with asthma at some point in their lifetime, compared to 14.5% of children nationwide.^{cclxiv} Approximately 23,700 children in Rhode Island (10.9% of the state's children) currently have asthma – compared with 8.8% of children nationally, 10.2% in Massachusetts and 11.0% in Connecticut.^{cclxv} Twenty-five percent of children with current asthma in Rhode Island missed one or more school days in the past year due to asthma.^{cclxvi}

According to a 2012 Rhode Island Department of Health report, the number of children (ages 0 – 18) who visited the emergency department, with asthma as the main reason for the visit, increased from 106 per 10,000 population in 2005 to 125 per 10,000 population in 2009 (age-adjusted).^{cclxvii} While some of these patients were sent home, many were admitted to hospitals as inpatients. Rhode Island's age-adjusted asthma inpatient hospitalization rate for children younger than 18 years of age (when asthma was listed as the first reason) increased from 20 per 10,000 population in 2005 to 26 per 10,000 population in 2009.^{cclxviii} The report cites that hospitalizations are related to factors that trigger asthma episodes but also a lack of access to primary care and the quality of primary care.

There were some disparities in asthma hospitalization rates. The 2012 Department of Health report indicated that Providence had an asthma hospitalization rate that was twice that of the state.^{cclxix} The major factor contributing to this difference cited by the report was poverty, as the city's poverty rate nearly doubled that of the state (27.7% versus 14.3%).^{cclxx} The cost of all charges attributable to asthma-related Rhode Island hospitalizations among both children and adults was estimated to be around \$35 million. Medicaid was the primary payer for asthma hospitalizations among children (ages 0 – 17), incurring 52% of all hospitalization costs.^{cclxxi} Public tax dollars paid for 63% of all adult asthma-related hospitalizations, as Medicare paid for 45% of all costs and Medicaid 18%.^{cclxxii}

Community Stakeholder Results

Asthma was cited as a top concern by 43.4% of statewide community stakeholders surveyed and 48.6% of stakeholders with members or constituents served by Rhode Island Hospital. This finding was supported by qualitative data gathered through interviews with internal stakeholders, including emergency department clinicians, social workers, and other medical experts – particularly those working at Rhode Island Hospital. This widely-cited and easily-addressed chronic condition is relevant statewide, to the degree that affected individuals may relocate from one hospital catchment area to another.

The significant number of adults and children coping with asthma has severe implications for employability, productivity, health care costs, and other economic factors, as well as quality of life for individuals and families. Also, to the degree that asthma is affecting children's health status and

educational achievement and compromising their attainment of critical developmental milestones, Rhode Island's future population is seriously threatened by the state's outsize prevalence of the condition.

Cancer

Cancer is the second-leading cause of mortality in Rhode Island, as it is nationwide.^{cclxxiii} In 2009, Rhode Island's age-adjusted cancer incidence rate (491.4 cases per 100,000 people) was the fourth highest in the nation.^{cclxxiv} The leading types of cancer incidence in Rhode Island were (in order):

- **Female breast cancer** (135.2 per 100,000)
- **Prostate cancer** (134.8/100,000)
- **Lung cancer** (72.2/100,000)
- **Colon cancer** (41.9/100,000)

The state ranks 26th nationally for cancer mortality in the United States. Forty percent of community stakeholders surveyed with members served by the Miriam Hospital and over one-third (34.0%) of community stakeholders statewide cited cancer as a top concern.

Methodology

To assess cancer incidence and mortality at the state and county levels, the CHNA relied primarily on the most recently available United States Cancer Statistics (USCS) data and the State Cancer Profiles (SCP) data. The USCS data is produced by the Centers for Disease Control and Prevention (CDC) and the National Cancer Institute (NCI), in collaboration with the North American Association of Central Cancer Registries (NAACCR). SCP is a collaborative effort that utilizes cancer data from both the county and national level from the CDC's National Program of Cancer Registries (NPCR) and NCI's Surveillance, Epidemiology and End Results Registries (SEER).

Cancer Incidence in Rhode Island

Rhode Island continues to have one of the highest cancer incidence rates in the U.S. In 2009, Rhode Island experienced 5,984 cases of cancer – translating to the fourth-highest age-adjusted incidence rate (491.4 cases per 100,000) in the nation.^{cclxxv} (Compared regionally, Connecticut had the highest overall cancer incidence rate in the U.S., and Massachusetts ranked 18th.^{cclxxvi})

Disparities are noted between counties: Newport County, Washington County and Kent County all had incidence rates that exceeded the statewide rate. While Providence County's incidence rate was under the statewide median, it exceeded the national rate, which held true for all Rhode Island counties.^{cclxxvii} Providence County had the second highest mortality rate from all cancer types, behind Kent County.^{cclxxviii}

The leading cancers in Rhode Island largely mirror national trends.^{cclxxix} According to the USCS, the cancers with the top ten (age-adjusted) incidence rates in Rhode Island are:

Top Ten Types of Cancer in Rhode Island, Ranked in Order of Incidence^{cclxxx}

1. **Female Breast** (135.2 per 100,000)

2. **Prostate** (134.8 per 100,000)
3. **Lung and Bronchus** (72.2 per 100,000)
4. **Colon and Rectum** (41.9 per 100,000)
5. **Urinary Bladder** (29.9 per 100,000)
6. **Corpus and Uterus, NOS** (25.5 per 100,000)
7. **Thyroid** (21.8 per 100,000)
8. **Melanomas of the Skin** (19.5 per 100,000)
9. **Non-Hodgkin Lymphoma** (17.7 per 100,000)
10. **Kidney and Renal Pelvis** (16.6 per 100,000)

Overview: Cancer Incidence in Rhode Island

■ Breast Cancer

Female breast cancer is the leading cancer diagnosis in Rhode Island.^{cclxxxix} At a rate of 135.2 cases per 100,000, Rhode Island has the fourth highest incidence rate of breast cancer for all races and all ages in the nation (the national rate is 122.9 cases per 100,000).^{cclxxxii} All Rhode Island counties have breast cancer incidence rates exceeding the national rate. Newport, Bristol, Kent, and Washington counties all have incidence rates exceeding the statewide rate. While Providence County's rate (129.7 per 100,000) is the lowest of Rhode Island's five counties, it is significantly higher than the national rate.^{cclxxxiii} Among African-Americans, there were 32 cases of female breast cancer in Rhode Island with 28 occurring in Providence County.^{cclxxxiv} The SCP data reports that each of the four other counties had "three or fewer" cases.^{cclxxxv} Among Hispanics, there were 42 cases, 35 of which occurred in Providence County.^{cclxxxvi}

■ Prostate Cancer

Rhode Island ranks 28th in the nation for prostate cancer incidence, with a rate of 134.8 cases per 100,000 – that is, below the nationwide rate (137.4).^{cclxxxvii} However, Providence County has the third highest incidence rate for prostate cancer in the state and is one of three counties with incidence rates that exceed the state average.^{cclxxxviii} Four counties (Washington, Newport, Providence and Bristol) have prostate cancer incidence rates that exceed the national rate. Twenty-nine of the 36 cases of prostate cancer were diagnosed in African-American males in Providence County.^{cclxxxix} The statewide rate for prostate cancer incidence in males of all ages is 185.4 cases per 100,000, which exceeds the nationwide rate of 124.4.^{ccxc} Of the 42 prostate cases among Hispanic men, 35 were in Providence County.^{ccxci}

■ Lung and Bronchus Cancer

Rhode Island has an incidence rate of 72.1 cases per 100,000 for lung and bronchus cancer, which is the 13th highest in the nation. The nationwide rate is 64.1, with a confidence interval of (63.8, 64.8) based on NPCR and SEER data.^{ccxcii} Differences again exist at the county level. Providence has the second highest annual incidence rate for lung cancer in the state and is only one of three counties – the others being Kent County and Newport County – with incidence rates that exceed the statewide rate.^{ccxciii} The incidence rate of lung and bronchus cancer for African-Americans of both sexes was 67 cases per 100,000 in Rhode Island, with 29 cases total.^{ccxciv} Twenty-two of the 29 lung cancer cases occurred in Providence County. The nationwide rate was 70.6 cases per 100,000 African-Americans (based on SEER and NPCR data).^{ccxcv} The statewide rate for Hispanics was lower (50.2 cases per 100,000 people) than the statewide rate for all races, but higher than the nationwide rate for Hispanics (34.7).^{ccxcvi}

■ Colon and Rectum Cancer

According to State Cancer Profile data, Rhode Island had the 28th highest rate of colon and rectum cancer in the country with 40.1 cases per 100,000, which was slightly higher than the nationwide rate (39.7/100,000). It had the third highest rate among states in New England, ranking better than Connecticut (40.8), and behind Maine (39.4) Massachusetts (36.9), Vermont (35.8) and New Hampshire

(33.4).^{ccxcvii} According to the SCP data, Providence County had the highest rate of colon cancer among counties in state (47.1 cases per 100,000), which exceeded the state rate.^{ccxcviii} Only Providence and Bristol counties had incidence rates for colon cancer that exceeded the statewide rates.

Cancer Mortality in Rhode Island

Rhode Island ranked 26th in the nation in terms of mortality from all cancers, with a rate of 174.5 deaths per 100,000 – a 1.8% decrease from 2008.^{ccxcix} Rhode Island slightly exceeded the nationwide mortality rate from all cancer types (173.1 deaths per 100,000). Providence County's annual mortality rate for all cancer types was 180.3 per 100,000, exceeding the national rate – but had also declined by 1.8% from the previous year. The leading causes of cancer mortality in Rhode Island differ from the incidence rates by cancer type, according to the USCS data. Mortality rates for lung and bronchus cancer, the leading cause of death from cancer in Rhode Island, are more than double the mortality rate from prostate cancer, the second leading cause of cancer death in the state.^{ccc}

Top Ten Types of Cancer in Rhode Island, Ranked in order of Mortality^{ccci}

(Source: *United States Cancer Statistics*)

1. **Lung and Bronchus** (48.9 cases per 100,000)
2. **Prostate** (22.5 per 100,000)
3. **Female Breast** (20.6 per 100,000)
4. **Colon and Rectum** (15.6 per 100,000)
5. **Pancreas** (10.1 per 100,000)
6. **Ovary** (6.9 per 100,000)
7. **Leukemia** (6.8 per 100,000)
8. **Liver and Intrahepatic Bile Duct** (6.3 per 100,000)
9. **Urinary Bladder** (5.1 per 100,000)
10. **Non-Hodgkin Lymphoma** (5.0 per 100,000)

Overview: Cancer Mortality in Rhode Island

▪ Lung and Bronchus Cancer

According to State Cancer Profile data, Rhode Island's statewide annual mortality rate from lung and bronchus cancers is currently 52.0 deaths per 100,000, which exceeds the nationwide rate of 50.6.^{cccii} Kent County has the highest mortality rate at 58.1 deaths per 100,000, followed by Providence County (52.2) and then Newport County (51.7).^{ccciii} Providence County's mortality rate exceeded both the state and national rates, but it had decreased by 1.7% from the previous year.^{ccciv} Rhode Island currently does not meet the Healthy People 2020 Objective for Lung Cancer at either the state or county level for any of its five counties. While the mortality rate for African-Americans in Rhode Island is under the national rate (54.4 versus 55.5 deaths per 100,000), the rate does not meet the Healthy People 2020 Objectives. Sixteen of Rhode Island's 21 deaths from lung and bronchus cancer among African-Americans were in Providence County. Among Hispanics, there were six lung cancer deaths in Rhode Island — a mortality rate of 11.9 per 100,000 — all of which were in Providence County.^{cccv}

▪ Prostate

Providence County's mortality rate from prostate cancer (20.9 deaths per 100,000 people) is lower than the statewide rate (22.5), the nationwide rate (23.6), and the lowest among the state's five counties.^{cccvi} Providence County is the only county that has met the Healthy People 2020 Objective for prostate

cancer. Of the There were five deaths from prostate cancer among African-Americans, putting the Rhode Island rate under the national rate. Four of these five deaths were in Providence County.^{cccvi}

- **Female Breast**

Rhode Island's female breast cancer mortality rate is 21.9 deaths per 100,000, below the nationwide rate (23.0).^{cccviii} Providence County has the third highest rate (22.2 deaths per 100,000). Bristol County has the highest rate (27.0), and Newport County has the lowest rate (19.6).^{cccix} The statewide rate has not met the Healthy People 2020 Objective; only Kent and Newport counties have female breast cancer mortality rates that have met the HPHP2020 Objectives.^{cccix}

- **Colon and Rectum**

Providence County's mortality rate from colon and rectum cancer (15.6 deaths per 100,000 people) is slightly worse than the statewide rate (15.4) but better the nationwide rate (16.4).^{cccxi} Neither the county nor state's death rates from colon cancer meet the Healthy People 2020 Objectives. Among African-Americans, there were seven deaths from colon cancer in Rhode Island—a mortality rate of 14.9 per 100,000 people.^{cccxi} Six of these deaths occurred in Providence County (the SCP data does not indicate where the other deaths occurred).^{cccxi} There were four deaths from colon cancer among Hispanics in Rhode Island, all of which occurred in Providence County.^{cccxi}

Community Stakeholder Survey Results and Key Informant Interviews

A *Community Stakeholder Survey* was initiated in the spring of 2013. Surveys were sent to community members and organizations served by Rhode Island Hospital and Lifespan's three other member hospitals. Fifty-four organizations responded statewide. Of these organizations, 35 responded that their members are served by Rhode Island Hospital. Key informant interviews were also conducted with nearly two-dozen community and organizational leaders across the state as part of the needs assessment.

Statewide, 34% of community stakeholders ranked cancer as one of the most significant issues facing their communities and organization's members. The number was slightly higher for organizations with members served by Rhode Island Hospital and/or its Hasbro Children's Hospital, 40% of whom indicated that cancer was among the most significant health issues.

In the Key Informant interviews, some participants indicated concern for an increased demand in services—particularly screenings, where there is already considerable strain, and surgical specialists—when more Rhode Islanders are insured under the Affordable Care Act and enter the health care system. Some stakeholders also expressed concern about the range of therapies currently covered under insurance.

Healthier Weight

Over the past two decades, the United States has experienced a dramatic increase in overweight and obesity rates. Although rates of increase for these metrics have leveled off in recent years, prevalence rates continue to remain at historic highs. According to the CDC and Healthy People 2020, the national age-adjusted obesity rate among adults age 20 and over increased by 57%, from 22.8% to 35.7%, in the years between 1988 and 2010.^{cccxv} The obesity rate among children and adolescents age 2 to 19 increased by 69% from 10.0% to 16.9% during the same period.

The CDC considers obesity a risk factor for multiple health conditions such as hypertension, adverse lipid concentrations, and Type 2 Diabetes.^{cccxvii} In June 2013, the board of the American Medical Association voted in favor of declaring obesity as a disease^{cccxviii} — reclassifying approximately 78 million American adults and 12 million children with obesity as having a medical condition requiring treatment.^{cccxix}

Incidence and Effects of Unhealthy Weight

Unhealthy weight cuts a wide swath of disease and disability through a population – with particularly notable impact on risk for heart disease and diabetes. Obesity and diabetes rates in Rhode Island are below the national median; however, the state ranks higher than both Massachusetts and Connecticut. The state exceeds the national and regional rates for overweight, heart disease death rates, and an array of behavioral and medical risk factors such as physical inactivity and borderline diabetes.

According to 2011 BRFSS data, Rhode Island has the 14th lowest obesity rate in the nation with an adult obesity prevalence rate of approximately 25.4%.^{cccxx} (Obesity is defined by the CDC as having a Body Mass Index, or BMI, of over 30.)^{cccxxi} This is lower than the national rate of 27.8% but higher than neighboring states such as Connecticut (24.5%, 8th lowest) and Massachusetts (22.7%, 3rd lowest).^{cccxxii} Providence County has the highest rate of obesity (26.55%) followed closely by Kent County (26.32%).^{cccxxiii} Newport County has the lowest rate (17.92%) while Washington County has a prevalence rate of 22.82% and Bristol County's rate was 24.23%.^{cccxxiv}

While Rhode Island fares better than the nation on obesity, the same is not true for the prevalence of overweight, which is defined as having a BMI between 25 and 30. Rhode Island ranked 46th in the nation with an overweight prevalence rate of 37.1%; only five states fare worse.^{cccxxv} (Connecticut ranked 20th with a prevalence rate of 35.2%, while Massachusetts ranked 42nd with a rate of 36.6%.^{cccxxvi})

All Rhode Island counties exceed the national overweight rate of 35.7%.^{cccxxvii} The 2011 BRFSS data shows that Newport County had the lowest overweight prevalence rate at 36.5%, followed in ascending order by Providence County (36.8%), Washington County (37.6%), Kent County (38.3%) and Bristol County (41.5%).^{cccxxviii} Given that each county and the state as a whole exceeds a national median that has steadily climbed over the last decade, overweight/obesity is clearly a significant problem across the state.

Heart disease is the leading cause of death in Rhode Island, as it is across the United States.^{cccxxix} According to the most recent data from the CDC's National Vital Statistics System, there were 2,322 deaths related to heart disease in Rhode Island in 2010.^{cccxxx} The state's mortality rate (not adjusted for age) was 220.6 deaths per 100,000 people, which was higher than the national rate of 193.6 deaths per 100,000.^{cccxxxi} The age-adjusted rate of heart disease mortality – 167.1 per 100,000 – was slightly lower than the national age-adjusted rate (179.1 per 100,000).^{cccxxxii} There were 431 deaths resulting from cerebrovascular disease (stroke) in Rhode Island in 2010, giving the state a mortality rate of 40.9 deaths per 100,000 people (31.4/100,000 age-adjusted).^{cccxxxiii} This is roughly in line with the national death rate from strokes in 2010 (41.9 deaths per 100,000), but considerably lower than the national age-adjusted death rate (39.1/100,000).^{cccxxxiv}

Providence County's lifetime incidence of heart attack/angina/stroke (7.97% of all residents) was higher than the statewide rate (7.89%).^{cccxxxv} There were 431 deaths resulting from cerebrovascular disease (stroke) in Rhode Island in 2010, giving the state a mortality rate of 40.9 deaths per 100,000 people (31.4/100,000 age-adjusted).^{cccxxxvi} This is roughly in line with the national mortality rate from strokes in 2010 (41.9 deaths per 100,000), but much lower than the national age-adjusted rate (39.1/100,000).^{cccxxxvii}

Rhode Island performs better than the nation as a whole in terms of diabetes incidence. The percentage of Rhode Islanders diagnosed with diabetes in 2010 (7.8%) was lower than the national average (8.7%), but higher than the prevalence rates in Connecticut (7.3%) and (7.4%).^{cccxxxviii} The preliminary 2011 BRFSS data indicates that the prevalence rate for diabetes in Rhode increased to nearly 8.5%.^{cccxxxix} Bristol County had the highest prevalence of diabetes (9.7%), followed by Providence County (9.2%), Kent County (7.6%), Newport County (7.3%) and Washington County 7.0%.^{cccxl} According to the same 2011 BRFSS data, Providence County had the second highest rate of high blood pressure (33.7% of all adults) in the state; the statewide rate was only slightly less at 33.1%.

Risk factors are also observed among Rhode Island's children and youth. In Rhode Island, 15.1% of children aged 10-17 were overweight and 13.2% were obese.^{cccxli} Nearly one in six (15.5%) of children entering kindergarten during the 2011-2012 school year in Rhode Island were obese, which is actually a decrease from a high of 20.3% in the 2004-2005 school year.^{cccxlii} Data from 2011 indicates that 10.8% of Rhode Island high school students were obese (13.2% of males and 8.4% of females) and 14.9% were overweight (both males and females had prevalence rates around 14.9%).^{cccxliii} Nationwide, an estimated 12.0% of high school students were obese and 14.7% were overweight.^{cccxliv}

According to an analysis of the data, there are large racial disparities in obesity rates among high school aged adolescents in Rhode Island. Students identifying as Hispanic or Latino had an overweight prevalence rate of 20.7%, compared to a rate of 13.8% among whites, 11.7% among black or African-American students, 6.0% among Asians and 16.8% among students identifying as multi-racial.^{cccxlv}

While overweight and obesity are significant issues facing children and adolescents in Rhode Island, so are hunger and food security (access to healthy, affordable food). The Supplemental Nutrition Assistance Program (SNAP) provides a monthly stipend for the purchase of healthy food to low-income families and individuals in Rhode Island. There were 66,924 children enrolled in SNAP in October 2012, of whom more than one-third (37%) were under the age of six.^{cccxlvi} This is an increase of 84% over the slightly more than 35,000 children participating in SNAP in 2005.

Over 23,800 of children receiving SNAP benefits (nearly 36%) reside in Providence. There were noticeable increases in SNAP participation in Barrington (289%), West Greenwich (318%), Scituate (323%), North Smithfield (371%), and Smithfield (404%). School breakfast is another way in which children in Rhode Island have access to healthy meals. The statewide participation rate in 2012 was 21%, or nearly 30,526 students.^{cccxlvi} Providence had the highest rate of participation (56%), followed by Central Falls (54%) and Woonsocket (34%).

Risk factors Among Rhode Island Adults

A review of 2011 results from the Center for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) Survey reveals a number of risk factors threatening healthy weight management at both the state level and among residents of Providence County:

- **34.54% of Providence County residents reported eating less than one full serving of fruit per day – less than any other Rhode Island county**
- **24.06% of Providence county residents reported eating less than one full serving of vegetables per day – which is the least favorable rate of all counties statewide**
- **53.5% of Providence County residents reported being either “inactive” or “insufficiently active,” which makes Providence County the least active county in Rhode Island**
- **Only 13.61% of those surveyed from Providence County said they exercised more than 2.5 times per week, which is the lowest rate for all Rhode Island counties; 40.71% said they exercised for thirty minutes or less each week, which is just slightly worse than the statewide rate (40.85%)**
- **Only 18.08% met both aerobic and strengthening recommended guidelines**
- **Despite cited access issues, BRFSS reveals Providence County residents' positive performance on two key cardiovascular metrics:**
 - **74.34% of adults in Providence County had their blood cholesterol checked in the past year (comparable to the 74.3% Rhode Island percentage), with 37.89% having been told at some point that they had high blood cholesterol (compared to 38.42% statewide)**
 - **53.53% of respondents said that they had never smoked, which is better than the statewide rate of 51.6% and the second highest percentage of non-smokers in the state.**

Risk factors among Rhode Island Children and Youth

The BRFSS data reveal the following snapshot of youth habits relevant to healthier weight:

- 12.1% of Rhode Island high school students did not participate in at least 60 minutes of physical activity on any day, which was lower (better) than the national median of 13.8%. Girls had higher rates of sedentary behavior, with 13.8% of high school girls in Rhode Island not reporting 60 minutes of physical activity on any day in the past seven days compared to 10.5% of boys.^{cccl}
- 45.7% of Rhode Island High School students engaged in physical activity for total of 60 minutes or more per day on five or more of the past seven days. The rates varied between race, with Hispanics having the lowest rate of exercise in the past five days: 35.3%, 38.2% Asian, 42.7% Black or African-American, 46.6% Multi-Racial, and 51.4% White.^{cccli}
- 78.3% of Rhode Island high school students attended physical education classes, which is much higher than the national median of 46.2%. However, only 23.3% of students attended physical education classes daily, compared to 24.2% nationwide.
- 63.5% of Rhode Island high school students ate fruit or drank 100% fruit juice one or more times a day within the past seven days (the national median was 60.5%)^{ccclii}
 - 34.1% ate fruit or drank 100% fruit juice one or more times a day, which was higher than the national median (30.2)^{cccliii}
 - 64.7% of Rhode Island high school students ate vegetables one or more times a day (compared to the national median of 61.1%); 29.6% ate vegetables two or more times a day (26.6% nationally) and 14.1% ate vegetables three or more times/day.^{cccliv}
 - The data did not indicate that there were large disparities among race for the percentage of high school students that ate fruits or vegetables five or more times a day: 22.1% overall, 23% Asian, 22.7% White, 22.6% black or African-American, and 21.3% Hispanic or Latino.^{ccclv}
- 20.2% of Rhode Island High School students drank soda or pop one or more times per day in the last seven days. The rates were much higher for male high school students (25.2%) compared to females 15.2%).^{ccclvi} There was little variation in rates based on race—18.9% of whites responded yes, 19.7% of Asians, 21.4% black or African-Americans and 21.5% of Hispanic or Latinos—with the exception of high school students who identified as multi-racial, who had a much higher rate of soda consumption at 26.2%.^{ccclvii}

Community Stakeholder Survey Results

A *Community Stakeholder Survey* was initiated in the spring of 2013. Surveys were sent to community members and organizations served by Rhode Island Hospital and Lifespan's three other member hospitals. Fifty-four organizations responded statewide. Of these organizations, 35 responded that their members are served by Rhode Island Hospital. Key informant interviews were also conducted with nearly two-dozen community and organizational leaders across the state as part of the needs assessment.

Concerns related to *healthier weight* were identified by community stakeholders statewide as among the most significant health challenges of the constituencies they serve. *Nutrition* was cited as a top concern by 67.9% of all respondents to the community stakeholder survey; *overweight/obesity* by 52.8%; *diabetes*

by 52.8%; *hypertension* by 43.4%; *childhood overweight/obesity* by 41.5%; *heart disease* by 39.6%; and *stroke* by 26.4%. Among community stakeholders who represent members served by Rhode Island Hospital/Hasbro Children's Hospital, 68.6% listed *nutrition* as a top concern, 51.4% said *diabetes*, 51.4% said *overweight/obesity*, and 40% said childhood overweight/obesity.

Social determinants of healthier weight

While interviews and survey responses did not cite direct correlations, healthy weight is also related to many of the other health and social issues identified. Poverty, unemployment, access to care challenges, mental illness, health literacy, and even asthma can affect lifestyle choices and other factors influencing healthy weight, such as ability to select, purchase, or cook nutritious meals; time, motivation, and safe places for exercise; and access to health services for the diagnosis and treatment of endocrine disorders and other medical conditions that may present a barrier to maintaining healthy weight.

A 2008-2010 Rhode Island Public Health Institute (RIPHI) survey of 29,000 adults, conducted in five lower-income Providence neighborhoods (Upper and Lower South Providence, Elmwood, the West End, and parts of Federal Hill) that are well-represented among Rhode Island Hospital's patient population, yielded the following insights about overall health status and health habits relevant to maintaining healthier weight, as well as information relevant to cancer, heart disease, diabetes, and other chronic diseases and conditions:^{ccclviii}

- **Most adults surveyed felt that their neighborhood was not safe enough from traffic (60%) or crime (57%) to walk or ride a bike.**
- **39% of respondents self-reported being overweight and 26% self-reported as obese**
- **34% of respondents reported having high blood pressure**
- **11% of respondents reported having diabetes**
- **10% of respondents reported having heart disease or having had a stroke**
- **8% of respondents had a history of cancer**
- **One of every three respondents said that they were unable to carry out daily activities on some days because of mental or physical health challenges**
- **70% said that they do not eat the recommended five servings of fruits and vegetables daily**
- **51% of respondents said that they do not get the recommended minimum amounts of daily activity**
- **19% are current smokers, but 80% of smokers have tried to quit**
- **82% of women surveyed had been screened for breast cancer, but only 47% of men had been screened for prostate cancer**
- **70% of respondents had been screened for high cholesterol**

In addition to noting respondents' concerns about public safety, the RIPHI survey team observed several neighborhood conditions that challenge the ability of residents to incorporate healthy levels of physical activity into their daily lives:

- **few green spaces (parks and playgrounds), gyms, and safe places to exercise**
- **poor sidewalk conditions**
- **little shade**
- **broken glass and litter**
- **few marked crosswalks**
- **few bicycle lanes**
- **no traffic lane markings on most streets**

One of the world's leading research teams dedicated to the study of weight management is affiliated with Alpert Medical School of Brown University and based at The Miriam Hospital. Among the team's significant contributions to the field is the repeated finding that maintaining healthier weight depends on a confluence of interrelated factors, including healthy nutrition and calorie intake; exercise and active lifestyle; and management of behavioral and mental health issues. Achieving meaningful progress on the population health level requires a confluence of will and action from many constituencies who have the ability and expertise to educate, motivate, and support weight management, and to provide people with the physical environments in which to pursue healthy lifestyles.

Mental Health

Various facets of *mental health* were identified by community stakeholders – on both the statewide levels and among survey respondents with members served by Rhode Island Hospital and/or its Hasbro Children’s Hospital – as the most significant health concern for the constituencies they serve. Statewide, *access to mental health services* was cited as a top concern by 75.5% of respondents; *mental health* by 67.9%; and *substance abuse* by 60.4%. Among respondents with constituencies served by Rhode Island Hospital and/or its Hasbro Children’s Hospital, 4.3% responded that *access to mental health services* was a significant issue in the community they served; 65.7% said *mental health* and 54.3% said *substance abuse*. A review of the quantitative and other qualitative data suggests that their concern is well founded.

Methodology

Quantitative data for this focus area are drawn primarily from the most current publicly available data through the Substance Abuse and Mental Health Services Administration (SAMHSA). Centers for Disease Control and Prevention (CDC) BRFSS data, community stakeholder survey results, and key informant interview data also supplement the quantitative data. Insights about pediatric mental health were drawn from data collected by Rhode Island KIDS COUNT, the CDC, and other sources.

Mental Illness

BRFSS data for 2010 reveals that Rhode Island had the highest rate of mental illness in the United States, in terms of percentage of adults reporting any type of mental illness (24.2% in Rhode Island vs. 19.7% in the U.S. as a whole.)

Rhode Island’s incidence of serious mental illness (SMI)^{ccclix} – defined by SAMHSA as “a diagnosable mental disorder that substantially interfered with or limited one or more major life activities” – is nearly double the national incidence (7.2% vs. 4.6%). The percentage of Rhode Island adults reporting major depressive episodes also far exceeded the national average, with 9.5% of Rhode Islanders reporting such events in 2010 compared with 6.5% of all Americans. (On this measure, Rhode Island is the only state in the nation ranking in the highest range.)

Suicide in Rhode Island

In 2010, Rhode Island had 129 suicides statewide, giving it an age-adjusted suicide mortality rate of 12.3 suicides per 100,000.^{ccclx} This is slightly higher than the nationwide rate of 12.1 suicides per 100,000, higher than the rate in Connecticut (9.4 per 100,000) but lower than Massachusetts (12.5 per 100,000).^{ccclxi} However, according to the CDC, the suicide rate among adults aged 35 to 64 in Rhode Island increased by 69% from 1999 to 2010, which was the third highest increase among states in the nation during that interval.^{ccclxii}

According to 2011 data, the percentage of high school students in Rhode Island who had ever attempted suicide (8.7%) was higher than the national rate (7.8%) and regional rates.^{ccclxiii} A 2011 issue brief by the Rhode Island Child Death Review Team (CDRT) – a multi-disciplinary team established in 1997 as part of the RI Department of Health, Office of State Medical Examiners – revealed that 77 young people between 13 and 24 had died by suicide in Rhode Island between 2005 and 2010.^{ccclxiv}

Suicide was the third leading cause of death among Rhode Island youth between the ages of 15-24 in the state in 2010.^{ccclxv} According to a 2013 report by the United States Centers for Disease Control and Prevention (CDCP), suicide was the second leading cause of death among children aged 12–17 years nationwide in 2010.^{ccclxvi}

For every suicide in Rhode Island among people ages 13 and 24 in 2010, there were approximately 100-200 suicide attempts.^{ccclxvii} About 500 youth are seen in the emergency department for a suicide attempt every year.^{ccclxviii}

While Rhode Island fared worse than the national median rate on youth suicide attempts, it fared better on suicide ideation. The percentage of high school students who seriously considered attempting suicide in Rhode Island was 12.3% in Rhode Island, with females having higher rates of ideation at 14.6% compared to 10.1% in males.^{ccclxix} The national median rate for high school students seriously considering suicide was 14.6%.^{ccclxx}

Behavioral health needs among Rhode Island children

Although Bradley Hospital is the primary locus of pediatric psychiatric health services in the Lifespan system, it shares considerable synergy with Hasbro Children’s Hospital through several medical education and research partnerships as well as clinical services – including a new program for children and adolescents who are experiencing both psychiatric and medical challenges. A review of Rhode Island’s youth mental health landscape is useful in this context.

The Maternal and Child Health Bureau (MCHB) of the United States Department of Health and Human Services defines children with special health care needs as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”^{ccclxxi}

Rhode Island’s percentage of children with one or more emotional or behavioral conditions exceeds the national average. According to 2013 Rhode Island KIDS COUNT data, 17% of Rhode Island children have at least one special health need, compared with 15% of all children in the United States. One-quarter (25%) of Rhode Island high school students reported having a disability in 2011.^{ccclxxii}

The most commonly reported health conditions among children in Rhode Island include Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder, developmental delay, anxiety, behavioral problems and depression. According to Rhode Island KIDS COUNT, 19% of children ages six to 17 in Rhode Island have a diagnosable mental or addictive disorder, mirroring the national experience.^{ccclxxiii} One in ten (9.8%) children in Rhode Island has a significant functional impairment.^{ccclxxiv}

Rhode Island fared slightly worse than the national experience in terms of the percentage of children with developmental delays, according to the 2011-2012 National Survey of Children's Health (NSCH) data. In Rhode Island 92.4% of children are estimated to have never had a development delay, while 3.6% were previously told they had a delay but currently do not, and 3.9% currently have a delay.^{ccclxxv} Nationwide, 94.3% of children ages 2-17 are estimated to have never had a developmental delay, while 2.6% of children were previously told that they had a delay but currently do not, and 3.6% currently have a developmental delay.^{ccclxxvi}

About three-fourths (76.8%) of Rhode Island children are at low or no risk of developmental or social delays, compared to 73.8% nationwide.^{ccclxxvii} However, racial disparities were prominent among children across the state for this metric. The NSCH estimated that only 6.0% of White, non-Hispanic children were at a high risk for a delay, compared to 17.3% of Hispanic children and 8.7% of Black, non-Hispanic children.^{ccclxxviii}

Care and hospitalization of children with mental illness in Rhode Island

Access to mental health services for children is a significant concern in Rhode Island.

The 2011-2012 NSCH estimated that 34% of children (6,430) in the state with mental illness needed but did not get mental health treatment or counseling in the past 12 months.^{ccclxxix}

While Rhode Island fared better than the national rate (39%), the state had the fourth best rate of all six New England states, followed only by Connecticut (35.0%) and Massachusetts (35.1%); Vermont (21.1%) and Maine (21.2%) had the second and third best rates nationwide respectively.^{ccclxxx} The survey again found significant variations between race, as 75% of Black, non-Hispanic children (565) and 74% of Hispanic children (2,833) in Rhode Island needed but did not receive mental health treatment in the past 12 months, compared to 17.2% of White, non-Hispanic children (1,901).^{ccclxxxi}

Over the period of 2001 to 2011, hospitalizations of children with a primary diagnosis of mental disorder increased 39% in Rhode Island.^{ccclxxxii} In 2011, there were 2,294 hospitalizations for children with behavioral health problems at Bradley Hospital, Butler Hospital, Hasbro Children's Hospital, Newport Hospital, and Memorial Hospital, compared to 1,647 hospitalizations in 2001.^{ccclxxxiii}

As Rhode Island KIDS COUNT indicates in its 2013 report, children or adolescents in need of behavioral health treatment are often “boarded” on medical/surgical units in hospitals or in emergency rooms when there is insufficient capacity at an inpatient psychiatric hospital or other suitable facility. In 2011, there were 388 boarders—children and youth under 18 with a psychiatric diagnosis, who were kept for an average of two days—at Hasbro Children’s Hospital or Rhode Island Hospital while awaiting treatment at institutions such as Bradley Hospital.^{ccclxxxiv} In 2012, that number dropped by 25% to 291 children.^{ccclxxxv}

Addiction in Rhode Island

Given high rates of substance abuse and mental illness co-morbidity, as well as the fact that treatment generally falls under the “behavioral health” umbrella, Rhode Island’s challenges in this area were considered in the context of mental health.

Rhode Island has the second highest illegal drug use rate in the country, only behind Vermont.^{ccclxxxvi} Drug-related deaths – mostly from opioids such as heroin and oxycodone – claimed the lives of 193 Rhode Islanders in 2008.^{ccclxxxvii} (There were 193-drug related deaths and 34 drug-related suicides in Rhode Island in 2008, the most recent year for which data is available.)^{ccclxxxviii}

Based on 2007 self-reported data, experts believe that about 55,000 Rhode Island adults use non-medical opioids.^{ccclxxxix} Rhode Island is one of only 16 states in which the number of deaths from opioid overdose now exceeds the number of fatal motor vehicle fatalities – which is particularly significant, given that Rhode Island’s percentage of fatal accidents that are alcohol-related also far exceeds the national average.^{cccxc} This correlates to national trends, which show overdose deaths quadrupling across the United States since 1980. Providence County has the second-highest drug-related mortality rate in Rhode Island (20.1 deaths per 100,000), compared to a statewide rate of 18.4 deaths/100,000 people.^{cccxi}

There is also cause for concern in the area of youth drug and tobacco use. While the number of high school students who had ever reported smoking in Rhode Island (35.0%) was lower than the nationwide rate (46.4%) and lower than the rate in Massachusetts (38.5%), the state had a higher percentage of high school students who had ever used marijuana (40.1%) than the nationwide rate (37.3%).^{cccxcii}

Community Stakeholder Results

A *Community Stakeholder Survey* was initiated in the spring of 2013. Surveys were sent to community members and organizations served by Rhode Island Hospital and Lifespan’s three other member hospitals. Fifty-four organizations responded statewide. Of these organizations, 35 responded that their members are served by Rhode Island Hospital. Key informant interviews were also conducted with nearly two-dozen community and organizational leaders across the state as part of the needs assessment.

Mental health and access to mental health services were dominant concerns among both statewide respondents and among those with members or communities served by Rhode Island Hospital. Overall, the most significant health concern statewide was *access to mental health services*, as over three-quarters (75.5%) of respondents statewide said that this was a significant issue. Nearly 68% of respondents reported that the more generalized concern of *mental health* was among their communities'/member's most significant health concerns. For organizations with members/communities served by Rhode Island Hospital/Hasbro, *access to mental health services* was cited by nearly three-fourths of respondents (74.3%) and *mental health* was mentioned by 65.7% of respondents. When respondents with members or constituents served by Rhode Island Hospital and/or Hasbro Children's Hospital were asked to rank their top three most significant issues, *access to mental health services* was the most significant issue (37.1%) and *mental health* (22.9%) was the fifth most significant.

Community Stakeholder Survey: Complete Results

In the spring of 2013, Lifespan Community Health Services, the Office of Community Relations, and staff from each of Lifespan’s four member hospitals created and distributed a *Community Stakeholder Survey* to nearly 70 community-based organizations across the state. Fifty-four individuals responded on behalf of a wide range of constituencies including organizations that represented minority or underserved populations, organizations representing specific health or social issues, organizations representing specific age groups, organizations that are focused on research and policy, public health department officials, public health leaders, and other organizations. (See *Appendix III for a list of Community Stakeholder Survey Respondents*). Those responding included organization executives and directors, in addition to front-line staff, social workers, community liaisons, scientists, nurses and case managers.

Of the 54 respondents, 35 – 65% of all respondents – stated that their communities/members were served by Rhode Island Hospital and/or its Hasbro Children’s Hospital. This section will provide an overview on the results of the survey at the statewide (aggregate) level—which includes all 54 respondents—and also for the 35 respondents who specifically mentioned that Rhode Island Hospital serves the communities they represent.

Most Significant Healthcare Needs

Rhode Island Hospital/Hasbro Children’s Hospital Stakeholder Opinions

In addition to the statewide results, the survey results were filtered for the 35 responses of individuals’ representing organizations with members served by either Rhode Island Hospital and/or Hasbro Children’s Hospital. When asked what the most significant health concerns are in the communities that each respondent’s organization serves, this survey subgroup primarily emphasize issues relating to access to health care services but expressed some concern around chronic conditions such as asthma, cancer and overweight/obesity.

▪ Access to Health Insurance	77.1%
▪ Access to Primary Care	74.3%
▪ Access to Mental Health Services	74.3%
▪ Affordability of Prescription Medication	68.6%
▪ Nutrition	68.6%
▪ Affordability of Health Services	65.7%
▪ Mental Health	65.7%
▪ Access to Social Services	62.9%
▪ Health Literacy	62.9%
▪ Access to Specialty Care	54.3%
▪ Substance Abuse	54.3%
▪ Diabetes	51.4%

▪ Overweight/Obesity	51.4%
▪ Asthma	48.6%
▪ Cancer	40.0%
▪ Childhood Overweight/Obesity	40.0%
▪ Hypertension	40.0%
▪ Smoking Cessation	40.0%
▪ Youth Health	40.0%
▪ Heart Disease	34.3%

The Three Most Significant Health Issues: Rhode Island Hospital Stakeholders

When this same subset of organizations were asked to list the three most significant health concerns in their communities, issues related to *access to care* (i.e. *access to insurance, primary care, mental health services, etc.*) stayed at the top of the list. *Nutrition* fell out of the top ten. *Access to mental health services* was the most significant issue and *mental health* as its own category was the fifth most significant issue. *Health literacy*—defined as “understanding of one’s own health conditions, proper health maintenance behavior”—was the fourth most significant health issue:

1. Access to Mental Health Services	37.1%
2. Access to Primary Care	34.3%
3. Access to Health Insurance	34.3%
4. Health Literacy	22.9%
5. Mental Health	22.9%
6. Access to Social Services	20.0%
7. Affordability of Medicine	20.0%
8. Substance Abuse	20.0%
9. Affordability of Health Services	11.4%
10. Cancer	11.4%

Statewide Stakeholder Opinions

At the **aggregate level (all 54 respondents)**, when asked to identify the most significant **health** concerns in the communities that each respondent’s organization serves, the most frequently cited issues were:

▪ Access to Mental Health Services	75.5%
▪ Access to Health Insurance	73.6%
▪ Access to Primary Care Services	71.7%
▪ Affordability of Prescription Medication	69.8%
▪ Affordability of Health Services	67.9%
▪ Mental Health	67.9%
▪ Nutrition	67.9%
▪ Health Literacy	62.3%
▪ Substance Abuse	60.4%
▪ Access to Social Services	58.5%
▪ Access to Specialty Care	54.7%
▪ Diabetes	52.8%
▪ Overweight/Obesity	52.8%

▪ Asthma	43.4%
▪ Hypertension	43.4%
▪ Childhood Overweight/Obesity	41.5%
▪ Smoking Cessation	41.5%
▪ Youth Health	41.5%
▪ Heart Disease	39.6%
▪ Cancer	34.0%
▪ Maternal/Infant Health	30.2%
▪ Stroke	26.4%

The Three Most Significant Health Issues: Statewide Stakeholders

All 54 respondents were then asked to list the three most significant healthcare challenges facing their constituents. Issues related to “access” to healthcare services, mental health services and health insurance remained at the top while health literacy—defined as *understanding of one’s own health conditions and proper health maintenance behavior*—moved up to the fourth most significant issue:

▪ Access to Mental Health Services	40.4%
▪ Access to Primary Care Services	38.5%
▪ Access to Health Insurance	30.8%
▪ Health Literacy	23.1%
▪ Mental Health	23.1%
▪ Affordability of Medicine	21.2%
▪ Access to Social Services	19.2%
▪ Substance Abuse	19.2%
▪ Affordability of Health Services	17.3%
▪ Cancer	9.6%
▪ Diabetes	7.7%
▪ Overweight Obesity	7.7%

Most Significant Social Needs

Rhode Island Hospital/Hasbro Children’s Hospital Stakeholders

When the survey results were filtered for the organizations that represent members served by Rhode Island Hospital and/or its Hasbro Children’s Hospital, economic challenges dominated the social issue ranking – with *unemployment* and *poverty* rank as the two most significant concerns:

• Unemployment	88.6%
• Poverty	80.0%
• Affordable Housing	74.3%
• Lack of transportation	74.3%
• Education	65.7%
• Child care	54.3%
• Food Security	51.4%

- **Language Barriers/Limited English Proficiency** 51.4%
- **Literacy** 48.6%
- **Neighborhood Safety** 48.6%

When asked to identify the three most significant social concerns, language barriers/limited English proficiency jumped to the fourth most important issue and, unlike the responses to the previous question, *immigration status* was in the top ten:

1. **Unemployment** 57.1%
2. **Poverty** 48.6%
3. **Affordable Housing** 42.9%
4. **Language Barriers/Limited English Proficiency** 31.4%
5. **Lack of transportation** 25.7%
6. **Food Security** 22.9%
7. **Education** 17.1%
8. **Immigration Status** 11.4%
9. **Violent Crime** 11.4%
10. **Literacy** 11.4%

When asked how to respond to these health and social needs, the subset of respondents representing members/communities served by Rhode Island Hospital and/or Children’s Hospital expressed a desire for increased access to mental health providers, primary care providers, healthy foods and bilingual/translation services. *Increased job opportunities* ranked as the second most significant response:

1. **Increased Access to Mental Health providers** 54.3%
2. **Increased Job Opportunities** 51.4%
3. **Increased Access to Primary Care Providers** 51.4%
4. **Increased Job Training Opportunities** 37.1%
5. **Access to Healthy Foods** 34.3%
6. **Access to Bilingual/Translation Services** 34.3%
7. **Health Screenings** 34.3%
8. **Improved Health Literacy** 34.3%
9. **Increased Access to Substance Abuse Programs** 34.3%
10. **Improved Communication with Medical Professionals** 25.7%

Statewide Stakeholder Results

Respondents were asked to identify the social determinants of health that impact their communities. These issues can often create barriers to accessing care or prevent optimal health outcomes. When respondents statewide were asked to identify what social issues were significant to their communities, the top ten issues were:

- **Unemployment** 84.6%
- **Poverty** 80.8%
- **Lack of Transportation** 76.9%

▪ Affordable Housing	75.0%
▪ Education	63.5%
▪ Food Security	59.6%
▪ Language Barriers/Limited English Proficiency	57.7%
▪ Neighborhood Safety	51.9%
▪ Child Care	50.0%
▪ Literacy	48.1%

When asked to identify the three most significant social concerns in the communities they serve, the order changed slightly at the state level but unemployment, poverty, affordable housing and transportation access remained at the top:

1. Unemployment	54.9%
2. Poverty	47.1%
3. Affordable Housing	43.1%
4. Lack of Transportation	33.3%
5. Language Barriers/Limited English Proficiency	25.5%
6. Food Security	23.5%
7. Education	15.7%
8. Violent Crime	11.8%
9. Literacy	11.8%
10. Immigration Status	9.8%

Respondents were also asked to identify what types of services or strategies would best address the community's health and social concerns. The statewide results are below:

1. Increased Access to Mental Health Providers	51.9%
2. Increased Job Opportunities	47.2%
3. Increased Access to Primary Care Providers	47.2%
4. Improved Health Literacy	35.8%
5. Access to Healthy Foods	30.2%
6. Increased Access to Substance Abuse Programs	30.2%
7. Increased Job Training Opportunities	30.2%
8. Access to Bilingual/Translation Services	28.3%
9. Health Screenings	28.3%
10. Improved Communication with Medical Professionals	28.3%

Analysis

The survey results reveal a substantial degree of community concern—both statewide and among organizations with members served by Rhode Island Hospital and/or its Hasbro Children's Hospital—around *access to healthcare services, access to primary care doctors, and access to insurance.*

While chronic diseases were less frequently mentioned by survey respondents, conditions such as *cancer* and *mental health* were listed among the top 10 most significant health issues at both the state level and among respondents with communities served by the Rhode Island Hospital/Hasbro Children's Hospital. These chronic conditions are often considered "downstream" diseases that may be affected or even prevented by focusing on "upstream" factors, or social determinants of health. Social determinants of health, such as employment and socioeconomic status, are often important factors in accessing health care services and are also areas in which Rhode Island has significant unmet needs. For organizations with members served by Rhode Island Hospital and/or its Hasbro Children's Hospital, unemployment, poverty and affordable housing were the three most significant social concerns.

Health literacy was identified as a major need by community stakeholders statewide and was the 5th most significant issue for respondents with members served by Rhode Island Hospital/Hasbro Children's Hospital. In addition, several individuals interviewed during the Key Informant interview process independently noted the importance of educating individuals about their own health conditions, how to effectively treat and manage their conditions, and how to access and navigate the health care system, particularly in the context of minority and immigrant populations.

In addition to unemployment, affordable housing and poverty, *language barriers/limited English proficiency* and *immigration status* were the fourth and eighth most frequently cited issues respectively when respondents from the Rhode Island Hospital/Hasbro Children's Hospital subset were asked to rank the three most significant issues facing their communities. This result reflects both the diversity of the community served by these hospitals and depth of potential challenges that exist in adequately serving the community.

Implementation Strategy

Rhode Island Hospital and its Hasbro Children's Hospital are committed to continuing to address the five critical health needs identified through the Community Health Needs Assessment:

Access to Care

Various facets of *access to care* – including *access to mental health services* (cited as a concern by 75% of respondents), *access to health insurance* (73.1%), *access to primary care* (71.2%), *affordability of health services* (67.3%), *affordability of prescription medication* (69.2%), *health literacy* (63.5%), *access to social services* (57%), and *access to specialty care* (53%) – were widely cited as compelling community health needs among external stakeholders statewide.

According to 2011 BRFSS data, 14.1%^{cccxciii} of all Rhode Island adults reported not having access to health insurance. Providence County had the highest rate of uninsured individuals at 17.13% while Washington County had the lowest rate (8.4%) of uninsured residents.^{cccxciv} Because access to health insurance affects how patients access providers, the BRFSS survey asked individuals whether or not they had one person that they thought of as their health care provider and personal doctor. According to this metric, Rhode Islanders fared significantly better than the nation as a whole. On the national level, 21.93%^{cccxcv} of patients reported that they had no regular health care provider, compared with 14.0%^{cccxcvi} of Rhode Islanders. At 14.7%,^{cccxcvii} Providence County had the highest rate in Rhode Island of individuals responding that they had no regular health care provider.

The cost of care was also cited as a barrier to accessing health care services for some individuals. When asked if there was a time in the past 12 months that they needed to see a doctor but could not do so because of cost, 18.0%^{cccxcviii} of Providence County residents responded yes, 15.8%^{cccxcix} of respondents in Rhode Island responded yes, and 16.91%^{cd} of respondents nationwide said yes. When respondents were asked if they had had a routine checkup within the past year, 75.2%^{cdi} of Providence County respondents responded that they had, which is slightly below the statewide average of 75.44%^{cdii} but above the nationwide rate of 66.08%^{cdiii}.

Rhode Island Hospital is deeply committed to ensuring that all people receive the care they need. In 2012, the hospital and its affiliates provided nearly \$152.2 million in net community benefit expenses for its patients, which accounted for almost 15% of its total expenses.

Rhode Island Hospital provides full charity care for individuals at or below twice the federal poverty level, with a sliding scale for individuals up to four times the poverty level. In terms of charity care – which is included as part of community benefit expenses – the hospital provided almost \$63 million in total financial assistance at cost to patients in 2012. In addition to this financial assistance, the hospital and its affiliates provided nearly \$83.9 million in medical and health professions education, nearly \$9.0 million in subsidized health services—including adult psychiatry, dentistry, adolescent medical/surgical services, and Alzheimer's care, as well as the Center for Special Children, early intervention and other specialty services—and \$11.3 million in unfunded medical research. The hospital also works to remove financial, language, and cultural barriers to care – providing translation services; multilingual signage in lobby and waiting areas, including financial aid contact information; help with benefits eligibility upon registration; and written information about assistance eligibility.

In addition to the above programs and benefits addressing access to care issues, Rhode Island Hospital intends to:

- **Enhance access to prescription drugs**

In 2013, Rhode Island Hospital opened a Lifespan pharmacy at the hospital – eliminating a major barrier for patients who are treated and discharged and need to fill post-discharge prescriptions. This new pharmacy will enable patients to leave the hospital with the prescriptions they need, thereby reducing anxiety, enhancing recovery, and reducing the likelihood of readmission. Nearly 77% of stakeholders surveyed statewide and 74% of stakeholders with members served by the Rhode Island Hospital indicated that a lack of transportation was a major unmet social need and barrier to care. This pharmacy will especially benefit patients for whom a lack of transportation is a major barrier by providing access to pharmaceutical drugs onsite at the hospital.

- **Expand access to ambulatory care**

Access to health care services – ranging from primary care to specialty care services – was an overwhelming concern indicated by community stakeholders. For example, nearly three-quarters (74.3%) of community stakeholders with members served by Rhode Island Hospital who were surveyed indicated that access to primary care services was a significant issue. Lifespan recognizes the need to provide care in settings that are more patient focused, cost effective and ensure better continuity of care. In January 2013, Lifespan's East Providence Ambulatory Center opened with a branch of Lifespan Laboratories as well as a Cardiovascular Institute (CVI) satellite that offers office visits and comprehensive testing services. The building will expand to offer outpatient dialysis and wound care treatment. The Center aims to serve nearly 19,000 patients annually. In February 2013, an ambulatory care center in East Greenwich opened with a Cardiovascular Institute (CVI) satellite, a Lifespan lab, and a pediatric multi-disciplinary clinic. In 2014, the clinic projects to conduct 380 evaluations and nearly 4,400 treatment interventions.

- **Provide oral health screenings for children enrolled in Head Start**

Through the key informant interviews conducted during the needs assessment, stakeholders – particularly those who work on children's health issues – indicated the significance of oral health issues for young children. At the state level, the Rite Smiles program has increased the number of dentists who accept Rite Care (Rhode Island's insurance program for low-income children) from 27 practitioners before the program's launch to 370 in 2011. At Rhode Island Hospital, the Samuels-Sinclair Dental Center is expanding access to oral health care for low-income children by performing annual dental screenings and treatments for 1100-1300 children enrolled in the Children's Friend Head Start Program since the program started in 2013. Children in need of more extensive care are referred to the Samuels-Sinclair Dental Center or their preferred dentist.

Lifespan: Addressing Access to Health Issues System-wide

Community stakeholders statewide reiterated the significance of issues related to access to care throughout the entire course of the needs assessment. For example, leaders within the minority community emphasized the need for increased health literacy programs that help their communities overcome language and knowledge barriers in order to better understand their health conditions and how to better access health services. Policy leaders and children advocates emphasized the significance of a lack of health insurance and the costs that uninsured patients place on the entire healthcare system.

Other stakeholders surveyed and interviewed stressed the importance of increasing access to primary care services, specialty care services and social services. Thus, Lifespan – through its four member hospitals, including Rhode Island Hospital, the Miriam Hospital, Newport Hospital and the Bradley Hospital – plans to tackle the issue of “access to care” through a multi-pronged, system wide approach that includes the following initiatives:

- **Partnering with Providence Community Health Centers**

Community stakeholders noted significant needs around access to health care services, social services and preventive services such as primary care access and health screenings. Rhode Island Hospital and Lifespan are addressing these and other community health needs by becoming anchor tenants at the Providence Community Health Center (PCHC) on Prairie Avenue. Opened in July 2012, the PCHC facility is a 40,200 square-foot building that replaces PCHC's 8,000 square foot Allen Berry site located at the Urban League building on Prairie Avenue. The Health Center is located at the site of the former Federated Lithographers building in Upper South Providence, an area with high unemployment and significant needs around access to health care services. Lifespan is the first long-term major tenant at the Federated site with a commitment to lease 27,000 square feet of commercial office space for 10 years with an additional 10-year lease option. Lifespan will locate its Community Health Services office, its Radiology School, the Hasbro Children's Hospital Children's Neurodevelopment Center and training classrooms at the facility. The Health Center is anticipated to ultimately provide an estimated 80,000 to 100,000 patient visits each year. Lifespan's investment in the health center as a long-term tenant will help provide the financial stability for the health center and also synergy between the health center and Lifespan's health programs.

- **Promoting women's health and access to health services**

Recognizing the need for accessing a wide range of health services, specialty care and social services, the Women's Medicine Collaborative offers a wide range of services to women, including the Women's Primary Care office, an office of Obstetric Medicine (at Rhode Island Hospital), Women's Specialty Services, Women's Behavioral Medicine, and the Center for Women's Gastrointestinal Medicine. This wide range of services – ranging from specialty care to mental health care – has been designed to directly respond to the community's increased need for diverse levels and types of care.

- **Promoting health literacy statewide**

Health literacy – that is, knowledge about health, prevention, and how and when to access health services – was widely cited as a deficit among community stakeholders surveyed. On behalf of Rhode Island Hospital and all of its member hospitals, Lifespan Community Health Services will continue to provide health education, screenings, and health-related printed material to the community.

- **Healthwise Workshops**

Leaders in the Latino, African, Asian, and other LEP (limited English proficiency) communities cited health literacy as one of the most important issues facing their constituents. Through the Healthwise Workshops, Lifespan Community Health Services will continue to provide community groups with culturally appropriate information about how to make healthy choices, handle minor illnesses and accidents, and communicate with health care professionals, among other health-related topics. The workshops are presented using PowerPoint presentations and printed Healthwise manuals. There is no fee for participation and the manuals are provided at no charge.

- **Providing free health screenings statewide**

Last year, 1,084 free screenings were provided by Lifespan Community Health Services, as stand-alone events or as elements of another program. These screenings – for blood pressure, cholesterol, and stroke risk – will continue to be offered at no charge to members of the community and, in most circumstances, to other nonprofit organizations, churches, and other organizations serving Rhode Island Hospital's community. Lifespan covers the cost of the screenings.

- **AED Grants Program**

Access to emergency medical care – particularly in the context of cardiac care – is an area where Lifespan is expanding the capacity of organizations and community members throughout the state to support improved chain of survival outcomes. This program, administered through Lifespan Community Health Services, assists large, community-based organizations and supports state efforts related to "heart safe communities" by providing an automated external defibrillator (AED) to their facility. In order for the facility to receive an AED, they must meet specific criteria and agree to training and compliance related to the proper use and maintenance of the device. Lifespan Community Health Services has 50 total AEDs available for distribution. As of August 2013, 14 sites have completed or are in the process of completing the program's training and received AEDs. The ultimate goal of the program is to ensure that all 39 cities and towns in Rhode Island have organizations with access to these devices.

- **Lifespan Community Training Center**

In addition to the AED Grant Program, Lifespan is focusing on emergency cardiac care through its Community Training Center. The Center, which is part of Lifespan Community Health Services (LCHS), was established to coordinate all American Heart Association Emergency Cardiac Care (ECC) programs throughout Lifespan and for CPR instructors in the community. In 2012, LCHS provides 1,136 provider classes and 11 instructor training classes, certifying or recertifying nearly 9,000 students.

Asthma

In 2010, adults (age 18+) in Rhode Island had the third highest self-reported lifetime asthma prevalence rate (16.7%)^{cdv} in the United States. The nationwide lifetime prevalence rate was 13.5%. Rhode Island also had the second highest rate for current asthma (10.9%) in 2010, compared to the nationwide rate for current asthma of 8.6%.^{cdv} The 2011 BRFSS data shows that the lifetime prevalence rate for Rhode Island adults decreased slightly to 16.44%.^{cdvi}

Disparities persist at the county level. In 2011, 17.58% of adults in Providence County reported that they had ever been told that they had asthma.^{cdvii} This was the highest rate among Rhode Island's five counties. Approximately 27,000 children in Rhode Island (11.3% of the state's children) reported that they currently have asthma – compared with 8.6% of children nationally, 9.2% in Massachusetts and 11.9% in Connecticut. About 39,000 Rhode Island children (17%) had been diagnosed with asthma at some point in their lifetime. Twenty-five percent of children with current asthma in Rhode Island missed one or more school days in the past year due to asthma. The hospitalization rate for childhood asthma was 143.8 per 100,000 in Rhode Island. This rate was again higher than the nationwide rate (125.5 per 100,000) and the rate in Massachusetts (125.5 per 100,000).

Asthma was cited as a top concern by 43.4% of statewide community stakeholders surveyed. This finding was supported by qualitative data gathered through interviews with internal stakeholders, including emergency department clinicians, social workers, and other medical experts – particularly those working at Rhode Island Hospital.

Adults with asthma typically manage their condition in the primary care setting, such as Rhode Island Hospital's new primary care centers. In the hospital setting, Rhode Island Hospital's Patient Prescription Program (PPP) provides free two-week doses for inhalers, intended for use by patients until they are able to see a primary care provider or specialist. Hasbro Children's Hospital treated 3,651 children and adolescents in the 2012 fiscal year in its Asthma and Allergy Center. The hospital will continue to treat patients with asthma and explore opportunities for partnering with community-based organizations around this critical issue. (See Appendix V for a complete list of asthma-related programs and resources at each of Lifespan's member hospitals.)

Cancer

About one-third (32.7%) of community stakeholders cited cancer as a top community health concern – perhaps reflecting the state's mixed profile for the disease. While Rhode Island's overall *cancer mortality rate* is lower than the national average, the state's *cancer incidence rate* presents cause for concern.

Rhode Island has the fourth-highest age-adjusted cancer incidence rate in the United States, at 497.3 cases per 100,000 people. Although it seems unlikely that higher cancer screening rates in Rhode Island fully account for its higher incidence rates, the state does appear to compare well in terms of the percentage of residents who are screened. According to 2010 BRFSS data, Rhode Islanders were significantly more likely (more than 5% over the national average) than all Americans to have been screened for breast cancer, cervical cancer, colorectal cancer, and prostate cancer.

Rhode Island Hospital's most significant contribution to the state's efforts to address cancer is its status as a founding partner of the Comprehensive Cancer Center. The Comprehensive Cancer Center gives patients access to oncology services at three area hospitals and many clinical trials through The Warren Alpert Medical School of Brown University and the National Institutes of Health. Rhode Island Hospital has also been designated a Blue Distinction Center for Complex and Rare Cancers by the national Blue Cross Blue Shield Association and Blue Cross Blue Shield of Rhode Island. This designation recognizes the hospital as a center for excellence in the treatment of brain cancers, as well as acute leukemia and esophageal, gastric, liver, pancreatic, rectal and thyroid cancers.

The hospital's Anne C. Pappas Center for Breast Imaging is the only facility in the state to be designated a Breast Imaging Center of Excellence by the American College of Radiologists. Rhode Island Hospital has pioneered groundbreaking clinical services, from intracranial stereotactic radiosurgery for brain lesions to tumor ablation to electronic brachytherapy for early-stage breast cancer, reducing treatment time from eight weeks to five days. The hospital is the only site in Rhode Island – and one of few in New England – where hyperthermic intraperitoneal chemoperfusion (HIPEC) therapy is available for patients with advanced cancer of the abdomen.

Rhode Island Hospital participates in National Cancer Institute (NCI)-supported clinical trials of new therapeutic agents in both adult and pediatric medicine, and is a participating hospital in the Brown

University-sponsored Cancer Oncology Group (BrUCOG.) Its Liver Research Center is actively researching the biology of cellular carcinoma of the liver.

In addition to the above activities, Rhode Island Hospital is an active community partner in initiatives to keep the community informed about prevention, diagnosis, and treatment options, and intends to continue to intensify its efforts through the Comprehensive Cancer Center:

- **Expand Comprehensive Cancer Center**

Stakeholders expressed concern about fragmentation in cancer care and difficulty in accessing services and coordinated care. Lifespan recognizes that access to specialty cancer care and a true continuum of care for cancer patients is a substantial unmet health need for patients across the state. In August 2013, Lifespan's three cancer centers—The Miriam Hospital, Rhode Island Hospital and Newport Hospital — merged into one system-wide Comprehensive Cancer Center, providing greater access to cancer specialists, psychosocial screenings with referrals to social workers and support services, enhanced patient and family education, patient navigators, genetics counselors and complementary therapies. A new location for adult oncology services in East Greenwich will open in fall 2013, expanding the geographic availability of the CCC to southern Rhode Island. As patients complete treatment, they will receive survivorship plans, which will also be shared with their primary care physicians.

Lifespan: System-wide Approaches to Cancer Education and Prevention

Stakeholders identified cancer as one of the leading clinical conditions that significantly impact the communities they serve. During the Key Informant interviews, some of the major concerns related to access to high-quality, comprehensive services for cancer patients, particularly those without health insurance. Access to increase preventive services was also identified as a significant need. Transportation was also seen as a barrier for some patients.

Lifespan is taking a system-wide approach to tackling issues related to cancer care and prevention. (See Appendix V for a complete list of cancer-related programs at each of Lifespan's affiliates.) Through leveraging its resources at the Rhode Island Hospital, the Miriam Hospital and Newport Hospital, Lifespan is building a system that provides comprehensive care for cancer patients and opportunities for prevention activities such as screenings for residents in the communities where they live. Specifically, Lifespan plans to initiate or continue the following programs:

- **Avenues of Healing**

Through Lifespan Community Health Services, Rhode Island Hospital invests in community cancer education by sponsoring seminars and conferences such as *Avenues of Healing*, an annual breast cancer program that provides education and information on breast cancer for survivors. Staff members from several hospital departments participate in interactive presentations on various cancer-related topics. More than 85 members of the community participated in the program in 2012.

- **Cancer Survivors Day 2014**

Through Lifespan Community Health Services, Rhode Island Hospital plans to participate in Cancer Survivors Day – an annual community cancer education program for cancer survivors and their families and friends – in 2014. Cancer experts from the hospital will offer presentations and answer questions.

- **Kickbutt Day**

Rhode Island Hospital supports this annual, youth-oriented program – in conjunction with Lifespan Community Health Services – designed to teach children and adolescents about the link between smoking and cancer. In 2012, 320 young people participated in this event.

- **Tobacco Prevention Programs**

Rhode Island Hospital will continue to support an array of school-based programs that carried the “no smoking” message. These programs, which are sponsored by Lifespan Community Health Services, reached 2,337 children and adolescents in 2012.

- **Lectures about smoking, smoking cessation, and cancer**

Throughout the year, Rhode Island Hospital experts and other invited speakers offer lectures about the links between smoking, cancer, and other serious illnesses. In 2012, 306 people were impacted by this program, which is sponsored by Lifespan Community Health Services.

- **SunSmarts**

Responding to the need for greater access to preventive services, Lifespan offers a community-based, collaborative effort involving Lifespan Community Health Services, the Partnership to Reduce Cancer in Rhode Island, the American Cancer Society, the Department of Health and University Dermatology. SunSmarts provides skin cancer screenings and detection service to community members at local beaches. Patients with any abnormalities are directly referred to University Dermatology or a provider of their choice. In 2012, the program screened 370 people.

Healthier Weight

Heart disease is the leading cause of death in Rhode Island, and the state’s mortality from heart disease and rates of overweight are higher than the national average. Working toward healthier weight addresses several areas of community health concern, including heart disease, diabetes, cancer, mental health, chronic disability, and more. To the degree that it correlates with depression and loss of function, it may also affect employability – in turn, impacting social determinants of health and access to care.

Not surprisingly, factors related to healthy weight – from *nutrition* (cited by 67.3% of community stakeholders), *overweight/obesity* (cited by 53.8%), *diabetes* (cited by 51.9%), *hypertension* (cited by 44.2%), *youth health* (cited by 42.3%), *childhood overweight/obesity* (cited by 40.4%), *heart disease* (cited by 38.5%), and *stroke* (cited by 25%) – surfaced consistently and frequently during our study.

- **Partnership Between the YMCA and the Cardiovascular Institute**

Physicians and staff from the Cardiovascular Institute at Rhode Island Hospital will work with the YMCA of Greater Providence on the creation of a Comprehensive Risk Management Program for those at risk for and with cardiovascular disease across the state of Rhode Island. This program has been successfully implemented at The Miriam Hospital, which will provide a strong model for Rhode Island

Hospital to modify and adopt. The program would provide patients a way to connect with a maintenance program upon completion of a rehabilitation program. Physicians at the Cardiovascular Institute are focused on patients they call “the worried well” and will work to get patients into the program before the onset of disease.

Lifespan: Addressing Healthier Weight System-wide

Several Rhode Island Hospital services address the needs of community members coping with challenges related to maintaining healthier weight. (See Appendix V for a list of programs related to healthier weight at Rhode Island Hospital and other Lifespan hospitals.) In addition to its hospital-based programs, Rhode Island Hospital is working with other Lifespan member hospitals and corporate departments – such as Lifespan Community Health Services (LCHS) – to develop a multi-pronged, comprehensive approach to obtaining and maintaining a healthier weight. Planned strategies include:

- **Community BMI Screenings**

Rhode Island Hospital will work with Lifespan Community Health Services (LCHS) to continue to offer body mass index (BMI) screenings in the community, featuring body fat analysis, education, and referral for follow-up (if needed) by hospital nurses. More than 210 members of the community received this service in 2012.

- **Nutrition Program in Partnership with Rhode Island Free Clinic**

Through this program, coordinated by LCHS, Rhode Island Hospital partners with the Rhode Island Free Clinic to offer *Raising the Bar on Nutrition*, a six-week nutrition program that encompasses cooking demonstrations; a recipe book; tracking of health indicators, including BMI; and counseling about changing food consumption patterns (such as increasing vegetable intake.) In 2012, this program served 81 people – for an estimated total impact of 238 lives, including family members and other members of the community who would share the healthier meals that would result from participation in the program.

- **Lectures**

In 2012, 142 community lectures about topics related to healthier weight were offered in the community. These programs will continue under LCHS at sites throughout the Lifespan system.

- **Collaboration with Providence School District**

Lifespan’s office of Community Relations plans to facilitate the participation of clinicians from Rhode Island Hospital and other member hospitals – particularly Hasbro Children’s Hospital and Bradley Hospital – as speakers at professional development seminars for nurses in the Providence School Department throughout the year.

- **Partnership with Overeaters Anonymous**

During the Key Informant interview process, stakeholders cited the need for greater support group services for patients struggling with healthy weight issues. This concern was most often mentioned in the context of the needs of bariatric surgery patients and patients enrolled in the Weight Management Program at The Miriam Hospital, as well as patients served by Rhode Island’s Hallett Center for Diabetes. Lifespan recognizes the need to increase options for patients throughout its healthcare delivery system. Rhode Island Hospital and other Lifespan affiliates will explore offering space for Overeaters

Anonymous groups and members to hold meetings and provide support to others struggling with weight management issues.

- **Sharing Lessons Learned from the Workforce *Healthy Rewards* Program**

Rhode Island Hospital participates in Lifespan's Healthy Rewards program, which offers free nutritional counseling and Weight Watchers membership to eligible employees and their dependents. The hospital regularly shares insights about the program experience with other area employers.

Mental Health

Access to mental health services is arguably Rhode Island's single most significant community health need, as demonstrated both quantitatively and qualitatively. Community stakeholders cited some aspect of mental health – access to mental health services (cited by 75% of those surveyed or interviewed), mental health (cited by 67.3%), and substance abuse (cited by 61.5%) – as a top concern.

Data suggests that their concern is well-founded. Rhode Island's incidence of mental illness (24.2%) is the highest in the nation, with 19.7% of Americans reporting some form of mental illness. The percentage of Rhode Islanders with serious mental illness (7.2%) is nearly double the percentage (4.6%) of the nation as a whole. The percentage of Rhode Islanders reporting a major depressive episode in the past year (9.5%) exceeds the national average (6.5%) by a third.

The state logged the third highest increase in rate of suicide in the United States between 1999 and 2010, with the youth suicide rate (3.3%) soaring above that of the nation (1.9%). Rhode Island is one of only 16 states in which opioid overdoses lead motor vehicle accidents as a cause of death.

Rhode Island Hospital provides a wide range of adult, adolescent, and child behavioral health services, including: psychiatry emergency services for adults, adolescents, and children; psychiatry consultation liaison services; correctional psychiatry program; inpatient and outpatient geriatric psychiatry programs; mood disorders program; gambling treatment program; anxiety disorders program; body dysmorphic disorders program; behavioral sleep medicine program; substance abuse treatment program; neuropsychiatric services; adult and pediatric neuropsychiatric services; adult and pediatric partial hospitalization programs; family research program; and the Bradley/Hasbro Children's Research Center.

The hospital is also undertaking the following initiatives:

- **Creation and expansion of space within the emergency department for highly specialized psychiatric care for patients**

The 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 ERs 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.

- **New inpatient unit for dual-diagnosed patients at Hasbro Children's Hospital**

Starting in 2012, children and adolescents (between the ages of 6 and 18) with both psychiatric and medical illnesses are treated in a newly renovated, secure, eight-bed unit at Hasbro Children's Hospital. Developed in consultation with experts in both pediatrics and psychiatry, the new unit offers a safe, comfortable environment with private and semi-private rooms and space for family, group, and milieu therapy. Rhode Island Hospital will continue to assess the community need for this level of care and explore options to expand this inpatient unit in upcoming years.

- **Expansion of Partial-Hospitalization Program**

Community stakeholders expressed a need for greater access to mental health services as well as a greater need for multiple levels of care for patients with serious mental illness. Open Monday through Friday and staffed by a multidisciplinary team of providers, the Partial Hospitalization Program at Rhode Island Hospital provides short-term treatment designed to help individuals with acute psychiatric problems. The volume of patients treated has expanded every year, logging a cumulative doubling of utilization over the past decade – rising from an average daily census of 11.75 patients in 2004 to an average daily census of 23.50 patients in 2013.

Lifespan: Addressing Mental Health Needs System-wide

As quantitative data demonstrates and as stakeholders responded throughout the CHNA, access to mental health is arguably Rhode Island's single most significant community health need. This issue impacts every city and town in Rhode Island. Therefore, Lifespan is leveraging its hospitals, departments at the corporate level, and its relationship with its newest affiliate, Gateway Behavioral Healthcare, to increase access to comprehensive mental health services. See Appendix V for a list of all mental health-related programs at Lifespan's partner hospitals. In addition to these programs, Lifespan plans to:

- **Leverage the value of Gateway Health as a Lifespan member**

In 2013, Gateway Health – the region's largest community-based provider of behavioral health services, with 42 locations serving more than 15,000 patients – became a Lifespan member organization. The new relationship will support new levels of synergy, building on a four-year-old collaboration through which Gateway has provided behavioral health triage services in the emergency departments of Rhode Island Hospital and Hasbro Children's Hospital.

- **Expand *Mental Health First Aid* Offered by Gateway Health**

In 2008, Gateway Health was selected as one of seven community health organizations nationwide to pilot a *Mental Health First Aid* training curriculum under the direction of the National Council for Community Behavioral Healthcare (NCCBH.) Gateway currently offers the training – which gives laypeople the means to deliver aid pending arrival of first responders, but not diagnose or act as a medical professional, in the same way as traditional CPR classes do – four to five times a year. Lifespan affiliates are considering providing support to offer the training more frequently throughout the year. Lifespan is also considering expanding its reach through its partnerships with a wide range of community organizations, from the Providence School Department to the Institute for the Study and Practice of Nonviolence

- **Temas Familiares**

Recognizing the need for increased social supports and services for young families, Lifespan Community Health Services helps support a Spanish parenting workshop. This program, 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.

- **Free Community Lectures**

In 2012, Lifespan – through its member hospitals and Lifespan Community Health Services – provided lectures on a range of mental health topics that reached nearly 147 individuals statewide.

Conclusion

Rhode Island Hospital's Community Health Needs Assessment was conducted at a time of extraordinary uncertainty – in the domestic and global economies, in the state and national health care systems, in the lives of individuals and communities, and for health care organizations.

Health care organizations will likely find already razor-thin margins shrinking further over the next few years, as reimbursement changes under federal system reforms begin to converge with the cumulative effects of years of rising uncompensated care. Demand for health services will likely rise as more people become insured through state health insurance exchanges, and – at least in the near term, until the healthcare workforce builds to necessary levels and the system recalibrates – hospitals will likely be asked to absorb new levels of volume exceeding the capacity of community-based health care resources. Severity of illness and need for chronic disease management will no doubt intensify as significant numbers of newly-insured individuals seek treatment for long-deferred health conditions. The challenges and opportunities that come with the maturation of Accountable Care Organizations remain to be fully realized and articulated.

The only real certainty is this: the roles of hospitals are changing, at the same time that our communities' needs are shifting and intensifying.

The people of Rhode Island Hospital and its Hasbro Children's Hospital are deeply committed to helping to improve the health status of their community. As a statewide and regional provider of critical health services, Rhode Island Hospital considers the community's health needs in the context of its fundamental imperative to sustain essential hospital-based services for all.

Although this Community Health Needs Assessment was conducted on behalf of Rhode Island Hospital, it was developed with the ultimate goal of informing community-wide health status improvement efforts that extend far beyond the hospital. The data and analysis included in the report is intended to serve as a useful resource for all health advocates, practitioners, policy experts, and others who are committed to working together to build a healthier Rhode Island. The people of Rhode Island Hospital and its Hasbro Children's Hospital look forward to collaborating with community partners, leveraging the strengths of many different organizations and constituencies, to advance that work on behalf of the people they serve.

Appendices

Appendix I: Lifespan Internal Stakeholder Interview & Participant List

1. Monica Anderson*, Community Liaison, The Miriam Hospital
2. Rowland Barrett, Ph.D*, Director, Center for Autism and Developmental Disabilities, Bradley Hospital
3. James Butera MD, Oncologist/Hematologist, Rhode Island Hospital
4. Mary Cooper MD, Senior Vice President & Chief Quality Officer, Lifespan Corporate Services
5. Gus Cordeiro, President & CEO, Newport Hospital
6. Mike Delmonico, Director of Physician Practices, Newport Hospital
7. Judy Diaz*, Director, Lifespan Community Health Services
8. Cathy E. Duquette PhD, RN*, Lifespan Corporate Services, Rhode Island Hospital, EVP, Nursing Affairs, Chief Quality Officer, RIH
9. Richard J. Goldberg MD*, Psychiatrist-in-Chief-RIH & TMH, Rhode Island Hospital
10. Geetha Gopalakrishnan, MD*, Medical Director Hallett Center, Miriam Hospital, Rhode Island Hospital
11. Traci Green PhD*, Epidemiologist, Rhode Island Hospital
12. Camille Gregorian, LICSW, Rhode Island Hospital, Clinical Manager, Adult Division (CG)
13. Dr. Heather Hall, Newport Hospital, Chair, Department of Psychiatry
14. Kathleen Hittner MD, Lifespan Corporate Services, SVP, Community Health
15. Shay Isamone, Manager, Community Practice Services, Newport Hospital
16. Peter Karczmar, MD*, Physician, Coastal Medical Group, The Miriam Hospital
17. Robin King, Business Development/Provider Relations, Newport Hospital
18. Susan Korber, MS, RN*, Director, Cancer Services and Ambulatory Care
19. Mark Lambert, Learning Technologies Specialist, Lifespan Learning Institute
20. Anastasia Luby, Lifespan Learning Institute, Manager Dec Support Survey Center, Decision Support Services
21. Fred Macri, Rhode Island Hospital, Executive Vice President & COO
22. Michelle McKenzie, Director, Community Access, The Miriam Hospital
23. Michael Mello, MD*, Rhode Island Hospital, Injury Prevention Center, Director
24. Laurie Mitchell, Lifespan Corporate Services, HR Officer for Physician Services
25. Stacey Oliver, Database Manager, Access, Bradley Hospital
26. Vincent Pera MD*, Medical & Program Director, Weight Management Program, The Miriam Hospital
27. John Peterson, Business Manager, Bradley Hospital
28. Lauren Pond, Rhode Island Hospital, Director of Case Management and Social Work (LP)
29. David Portelli, Rhode Island Hospital, The Miriam Hospital, Physician, Emergency Medicine
30. Julie Rawlings, Minority Outreach Specialist, Lifespan Community Health Services
31. Josiah "Jody" Rich MD*, General Internist, The Miriam Hospital
32. Henry Sachs MD, President & CEO, Bradley Hospital
33. Arthur Sampson, The Miriam Hospital, Executive Director
34. Fred Schiffman, The Miriam Hospital, Medical Director, Comprehensive Cancer Center
35. Rachel Schwartz, Vice President, Strategic Planning, Lifespan Corporate Services
36. Jay Spitulnik, Lifespan Learning Institute, Organizational Consultant
37. Tara Szymanski, Manager, Oncology Data Management, Rhode Island Hospital
38. Sivamainth Vithiananthan, MD, Chief of Minimally Invasive and Bariatric Surgery, University Surgical Associates, The Miriam Hospital
39. Patrick Vivier MD*, Rhode Island Hospital/Hasbro, Brown University, Director, MPH Program Associate Professor
40. Dan Wall, Bradley Hospital, President & CEO

**Indicates that contact person has affiliations both with Lifespan and with community organizations*

Appendix II: Key Informant Interviews

1. Abacus Health Solutions, Dave Ahearn*, Founder and Senior Scientist
2. American Cancer Society, Alexandra Fiore
3. Brown School of Public Health, Terrie Fox Wetle
4. Department of Health, Michael Fine, MD, Director, Public Health
5. Dorcas International Institute of RI, Carol Holmquist Executive Director
6. East Bay Community Action Program (EB CAP) - Newport Health Center, Dennis Roy, CEO
7. Economic Progress Institute, Linda Katz
8. Gateway Healthcare, Richard H. Leclerc, Director
9. Guatemalan Consulate, Patricia Lavanino
10. Injury Prevention Center, Dr. Michael Mello
11. Institute for the Study & Practice of Nonviolence, Teny Gross, Director
12. Kids Count, Elizabeth Burke Bryant
13. Latino Public Radio, Pablo Rodriguez
14. Newport County Community Mental Health Center, Bud Cicilline
15. Oasis International, Muraina "Morris" Akinfolarin
16. Overeaters Anonymous, Michelle A., Member
17. Partnership to Reduce Cancer in Rhode Island, Bill Kokonis
18. Progreso Latino, Mario Bueno
19. Providence School Department, Donna O'Connor
20. Rhode Island Free Clinic, Marie Ghazal, MS, RN, CEO
21. RI Breast Cancer Coalition, Marlene McCarthy
22. Socio Economic Development Center for Center for Southeast Asians, Channavy Chhay
23. Urban League, MJ Daly
24. YMCA of Greater Providence, Neta Taylor-Post

Appendix III: Community Stakeholder Survey Respondents

1. AARP, Kathleen Connell Executive Director
2. African Alliance of RI, Julius Koale, President
3. AidsProjectRI, Thomas Bertrand, Executive Director
4. American Cancer Society, Alexandra Fiore
5. American Lung Association of the Northeast, Betina (Tina) Ragless, Director of Health Education
6. Blue Cross/Blue Shield, Bobby Rodrigues
7. Brown School of Public Health, Terri Fox Wetle
8. Camp Street Community Ministries, Jackie Watson
9. Center for Prisoner Health and Human Rights, Miriam Hospital/Brown University Medical School, Bradley Brockman, Executive Director
10. Chinese Nursing Association, Irene Qi
11. Community Asthma Program, Daphne Koinis-Mitchell, PhD
12. Community Health Workers Association of Rhode Island, Beth LeMarre Brown Medical School, Beth Lamarre
13. Crossroads of Rhode Island, Don Laliberte, Director of Social Services
14. Rhode Island Department of Health, Beatriz Perez, Manager, Safe Rhode Island/Rhode Island Youth Suicide
15. Rhode Island Department of Health, Ana Novais
16. Gateway Healthcare, Richard H. Leclerc
17. Goodwill Industries of Rhode Island, Denise Doktor, Case Manager / Employment Services Coordinator
18. Health Centric Advisors, Rosa Baier, Senior Scientist
19. Health Leads Providence, Adam Shyevitch, Executive Director
20. Injury Prevention Center at Rhode Island Hospital, Michael Mello, MD, MPH
21. James L. Maher Center, William Maraziti, CEO
22. Jewish Alliance of Greater Rhode Island, Marty Cooper, Community Relations Director
23. Martin Luther King Community Center, Marilyn Warren, Executive Director
24. McAuley House, Reverend Mary Margaret Earl, Associate Director
25. Mental Health Association of Rhode Island, Susan Jacobsen, MA, LMHC Executive Director
26. The Miriam Hospital, Ambulatory TB/Immunology Department, [No name listed], Clinical Manager
27. Mount Hope Learning Center, Elizabeth Winnegan
28. Mount Hope Neighborhood Association, Ray Watson
29. NAACP Providence, Jim Vincent, President
30. National Association of Social Workers (NASW) RI Chapter, Rick Harris, President
31. Newport County Community Mental Health Center, J. Clement Cicilline
32. Overeaters Anonymous, Michelle A.
33. Parent Support Network of Rhode Island, Cathy Ciano
34. Partnership to Reduce Cancer in RI, Bill Koconis, Secretary
35. Progreso Latino, Mario Bueno, Executive Director
36. Project Night Vision, Kobi Dennis, Founder
37. Providence School Department, Donna O'Connor
38. Refugee Clinic at Hasbro Children's Hospital, Dr. Carol Lewis
39. Rhode Island Division of Elderly Affairs, Catherine Taylor, Director
40. Rhode Island Health Center Association, Jane Hayward, President & CEO
41. Rhode Island Parent Information Network, Matthew Cox
42. Rhode Island Public Health Association, Amy Signore, MPH, President
43. Rhode Island Public Health Institute at Brown University, Patricia A. Nolan, MD, MPH, Executive Director

44. Rhode Island Adult Education Professional Development Center, Jill Holloway, Director
45. Rhode Island Breast Cancer Coalition, Marlene McCarthy
46. Rhode Island Dept of Corrections, Fred Vohr MD, Medical Program Director
47. Rhode Island Free Clinic, Marvin Ronning
48. Samuels Sinclair Dental Center, Shirley Spater Freedman, DMD, Director
49. Socio-Economic Development Center for Southeast Asians, Channavy Chhay, Executive Director
50. Taming Asthma, Dr. Peter Karczmar, MD
51. TB & Immunology, The RISE Clinic (Miriam's Hospital), E. Jane Carter
52. United Way of Rhode Island, Kyle Bennett, Director of Annual Giving
53. Visiting Nurses Services of Newport and Bristol Counties, Jean Anderson, CEO
54. Women's Center of Rhode Island, Vera Medina-Smith, Residential Supervisor

Appendix IV: Lifespan Community Stakeholder Survey

Lifespan's 2013 Community Health Needs Assessment (CHNA) — Community Stakeholder Survey

Introduction

This brief, 13-question needs assessment survey is being circulated to organizations and individuals representing the *broad interests of the community* across Rhode Island.

The goal of the survey is to ensure that the community is a direct part of Lifespan's 2013 Community Health Needs Assessment process.

The information that you share in the survey will be aggregated and analyzed for inclusion in the report. The survey will close on April 26, 2013. Your participation is greatly appreciated.

-
-
1. Your Name
 2. Your Title
 3. Organization Name
 4. Types of Services Provided
 - Advocacy/Policy
 - Social Services
 - Clinical/Health Services
 - Other

Defining Your Community: Questions 5-12 Ask for Demographic Information on the People/Communities You Serve

5. Does your organization serve the entire state of Rhode Island?
 - Yes (Skip to Question 8)
 - Yes, we also serve southeast Massachusetts (Skip to Question 8)
 - No, organization works primarily at the county level (Skip to Question 6)
 - No, my organization works primarily at the city/town level (Skip to Question 7)
6. Counties
 1. Not Applicable
 2. Bristol
 3. Kent
 4. Newport
 5. Providence
 6. Washington
7. Cities/Towns
 1. Not Applicable
 2. Barrington
 3. Bristol
 4. Burrillville
 5. Central Falls
 6. Charlestown
 7. Coventry
 8. Cranston
 9. Cumberland
 10. East Greenwich
 11. East Providence

12. Exeter
13. Foster
14. Gloucester
15. Hopkinton
16. Jamestown
17. Johnston
18. Lincoln
19. Little Compton
20. Middletown
21. Narragansett
22. New Shoreham
23. Newport
24. North Kingstown
25. North Providence
26. North Smithfield
27. Pawtucket
28. Portsmouth
29. Providence
30. Richmond
31. Situate
32. Smithfield
33. South Kingstown
34. Tiverton
35. Warren
36. Warwick
37. West Greenwich
38. West Warwick
39. Westerly
40. Woonsocket

8. Do you have a primary focus on an age group?

- No
- Yes (If yes please answer question 9)

9. If you answered yes to Question 8, please complete this question:

- Children Under Age 18
- Adults
- Elderly
- Families
- Other _____

10. Race/Ethnicity

- Not applicable
- Asian
- Black or African-American
- Hispanic/Latino
- Non-Hispanic White
- Native Hawaiian or Pacific Islander
- Other _____

11. Languages (list all that apply)

- Not Applicable
- African Dialects
- Arabic
- Burmese
- Cape Verdian Creole
- Cambodian
- English
- French

- Karen
- Mandarin
- Portuguese
- Russian
- Spanish
- Other _____

12. Estimated number of people you served in 2012:

- Not Applicable
- 0-100
- 100-500
- 500-1,000
- 1,000-10,000
- 10,000 – 50,000
- 50,000+

13. What Lifespan Hospital(s) would you say serves most of your members?

- a. Not Applicable
- b. Bradley
- c. Miriam
- d. Newport
- e. Rhode Island Hospital
- f. Hasbro Children's Hospital

14. What are the most significant health concerns in the community that you serve (list all that apply)?

- Access to Primary Care
- Access to Mental Health Services
- Access to Specialty Care
- Access to Social Services
- Access to Health Insurance
- Alcohol Abuse
- Affordability of Health Services
- Affordability of Prescription Medication
- Asthma
- Cancer
- Childhood Overweight/Obesity
- Drug Abuse
- Diabetes
- Health Literacy (Understanding of one's own health conditions, proper health maintenance behavior, etc.)
- Heart Disease
- Hypertension
- Maternal/Infant Health
- Mental Health
- Nutrition
- Oral Health
- Overweight/Obesity
- Sexually Transmitted Diseases
- Smoking Cessation
- Stroke
- Youth Health

15. Which of the health concerns that you identified are the three most significant in the communities you serve?

16. What are the most significant social concerns in the community that you serve (list all that apply)?

- Affordable Housing
- Child Care

- Domestic Abuse
- Education
- Food Security
- Gang Violence
- Immigration Status
- Lack of transportation
- Language Barriers/Limited English Proficiency
- Literacy
- Parent Support Services
- Poverty
- Unemployment
- Other _____

17. Which of the social concerns that you identified are the three most significant in the communities you serve?

18. Your selection of the issues above is based primarily on (check all that apply):

- a. Member feedback
- b. External research data
- c. Utilization data
- d. Other _____
- e. Not Applicable

19. What are the key services or strategies do you think can help address the social and health concerns for the people you serve? (Choose no more than three)

- Access to Healthy Foods
- Access to bilingual/translation services
- Health screenings
- Health Education
- Improved Health Literacy
- Improved Communication with Medical Professionals
- Increased Job Opportunities
- Increased Job Training Opportunities
- Increased Access to Mental health providers
- Increased Access to Primary Care Providers
- Increased Access to smoking cessation programs
- Increased Access to smoking prevention programs
- Increased Access to substance abuse programs
- Support groups for chronic diseases/conditions
- Other _____

Appendix V: Lifespan Resources and Programs for Key Issue Areas

Asthma

Bradley Hospital and Research Center

Childhood Asthma Research Program
Project ARC: Asthma Management and Ethnic Disparities at the Adolescent Transition
Adolescent-Parent-Provider Communication in Latinos with Asthma
Asthma and Academic Performance in Urban Children
The Evaluation of “Asthma 102” Program, Stress and Immunity in Pediatric Asthma
Asthma and Academic Performance in Urban Children
The Community Asthma Program (CAP)
Project REACH: Resilience and Asthma in Children
Project SAIL: Stress, Asthma, and Immunity Links

Hasbro Children’s Hospital

The Respiratory and Immunology Center: Allergy and Immunology
Pediatric Pulmonary
Pediatric Rheumatology
Full-service Laboratories
Hospital inpatient care
Specialist on 24-hour call
Childhood Asthma Research Program
Community Asthma Programs
Pharmacy/Draw A Breath Program (DAB)
Providence School Asthma Partnership Program
Asthma Camp
Hispanic Asthma Support Group for Parents
Asthma School Lunch Program and the Emergency Room Diversion Program
Community Outreach and Training

Newport Hospital

Pulmonary Medicine

Rhode Island Hospital

Research: New Treatments for Asthma Attacks
Medical Decision Making of Acute Asthma Severity

Lifespan Community Health Services

Family Program
Support groups
Education Programs

Cancer

Hasbro Children’s Hospital

Division of Pediatric Hematology and Oncology
Evaluation, diagnosis, and treatment
Survivorship care
Pediatric Leukemia/Lymphoma Services
Pediatric Neuro-Oncology
Pediatric Solid Tumors
Bleeding Disorders: Hemophilia and Homeostasis Program

Hematology: Hemoglobinopathy Services (Sickle cell) Thalessemias
Fertility Preservation
Comprehensive Health Assessment and Management for Pediatric Cancer Survivors (CHAMP)

The Miriam Hospital

The Comprehensive Cancer Center
Brachytherapy
Chemotherapy
Combination Treatment
IMRT
Interventional Radiology
Robotic Prostatectomy
Robotic Radiosurgery
Surgery (Da Vinci Surgical System)
Soft Brachytherapy
Screening and diagnostics
Cancer clinical trials

Newport Hospital

The Comprehensive Cancer Center (same as above)
ICAN COPE (Cancer) support group

Rhode Island Hospital

Blue Distinction Center for Complex and Rare Cancers
Breast Cancer Services
Comprehensive Cancer Center (same as above)
Comprehensive Care for Area Patients
Cancer Clinical Trials
Cyberknife
Gamma Knife
Image Guided Tumor Ablation
Radiation Therapy
Radiofrequency Ablation
Radiosurgery
Trilogy Image Guided Radiation Therapy

Lifespan Community Health Services

Support groups
Health Screenings: Breast cancer, Prostate cancer, Skin Cancer
Workshops and seminars: National Cancer Survivors Day, Breast Health Education

Healthy Weight

Bradley Hospital and Research Center

Adolescent Obesity
Role of parents in adolescent weight control
Integrated treatment for overweight adolescents with depression
Chronic Disease Management
Development of an Illness Beliefs Questionnaire for Pediatric Illness
Development of the Pediatric IBD
Behavioral Health Registry

Hasbro Children's Hospital

Adolescent Weight Management Program
Creating Healthy Attitudes Nutrition Goals and Exercise Strength (CHANGES)
Division of Pediatric Endocrinology and Metabolism

Patient care
Medical education and research
My Diabetes Online Program
Pediatric Diabetes Program for kids and teens with Type I diabetes

The Miriam Hospital

Weight Management Program
Bariatric Surgery
Weight Research Programs
Weight Control and Diabetes Research Center
Cognitive Effects of Bariatric Surgery
Sleep Duration and Pediatric Overweight: The Role of Eating Behaviors
Prevention of Postpartum Weight Retention
Weight Control and Diabetes Research Center
The Look AHEAD Continuation: Action for Health in Diabetes
Gene X Behavioral Interaction in the Look AHEAD program
The Cardiovascular Institute

Newport Hospital

Community Classes and Programs
Enough is Enough (6-wk weight loss program)
Yoga
A Healthier You
Risk Factor Reduction Program
Employee Health Promotion Programs
Weight management (Weight Watchers, yoga, nutrition)
On-site fitness center
Wellness profile
Healthwise Handbook
Diabetes Support Group

Rhode Island Hospital

Placebo
Diet/behavior modification
Drug therapy
Gastric Bypass
Gastric adjustment band
Vertical sleeve gastrectomy
Educational programs
Rhode Island Hospital Nutrition Teaching Center
Weight Loss Success Striders
Diabetes and Endocrinology
Pediatric Diabetes program
Diabetes and treatment management
Osteoporosis testing and treatment
Diabetes outpatient education
General clinical services
Comprehensive Diabetes program
Coordinated Care of Diabetes Complications
The Cardiovascular Institute

Lifespan Community Health Services

Support groups
Healthy screenings
Blood pressure
Body fat analysis

Cholesterol
Health risk assessment
Workshop and seminars
Heart health education
Hypertension/stroke awareness
Health education and lecture programs
Emergency cardiovascular care program for kids
HITECH Heart Program
Life support/CPR training
Diabetes education
Women's Wellness
Diabetes Outpatient Education
Healthwise for Life

Mental Health

Bradley Hospital and Research Center

Access Center
Crisis Service
Adolescent Services
Inpatient Treatment Services
Outpatient Services
Partial Hospital Program
SafeQuest
AfterSchool with the Arts
Parenting Resources
Effective Discipline
Healthful Leisure
Alcohol and Drug Abuse
Parent and Child Communication
Depression and Suicide
Teens and Parties
Childhood chores and Life's Difficult Changes
Raising Mentally Healthy Babies and Toddlers
ADHD
Divorce over the holidays
Halloween fears
Parenting in a digital age
Illusion of Prom Perfection
Childhood OCD
Child's Military Parent is deploying
Autism and the holidays: Sensory Overload
Avoiding Homesickness
HIV Prevention
Adolescent Relationships
Infant and Toddler Development
Early Childhood Mental Health
Preschool Intervention Programs
Prevention in Headstart
Primary Care
Biological Basis of Psychiatric Disorders
Neuroimaging
Bipolar Disorder
Mood Disorders
Sleep and Chronobiology
Response to Traumatic and Chronic Stress

Autism
Genetics
Child Adolescent Psychological Disorders
Anxiety Disorders and Obsessive Compulsive Disorder
Mood Disorders and their treatment
Substance Abuse
Depression
Suicide
Forensic Issues/Juvenile Justice
Court Clinic: Intervention for Offenders
Adolescent Criminality
Health Services Research
Adolescent Substance Abuse
Pediatric Behavioral Health
Sibling Adaption
Adolescent Obesity
Sleep
Prevention and Early Intervention

Hasbro Children's Hospital

Psychiatry Emergency Services
Child and Adolescent Forensic Psychiatry
Pediatric Consultation and Liaison Service
Early Childhood Clinical Research Center
Pediatric Anxiety Research Clinic
SibLink: a program for siblings of children with medical, developmental and behavioral problems
Pediatric Neuropsychology Service
Outpatient Services: Child and Adolescent Psychiatry

The Miriam Hospital

Psychiatry Emergency services
Consultation-Liaison
Correctional Psychiatry
Inpatient Services
Mood Disorders
Family Research
Neuropsychiatry
Substance Abuse Treatment
Neuropsychology Services
Outpatient Services
Body Dysmorphic Disorder
Behavioral Medicine
Partial hospitalization
Neuropsychological Evaluation
Integrated Behavioral Medicine Services
Adult Outpatient Behavioral Medicine Services
Geriatric Psychiatry
Nursing Homes psychiatry consultation program
Neuropsychology
Psychiatric consultation
Geriatric outpatient services
Education and research

Newport Hospital

Adult Partial Hospitalization Program
Consultation Liaison Services

Adult Inpatient Psychiatric Services
Adult Outpatient Services
Alzheimer's Caregiver Support Group
Behavioral Health Support group
Behavioral Medicine
Memory Assessment Program

Rhode Island Hospital

Inpatient services
Substance abuse
Consultation-Liaison Services
Correctional Psychiatry
Electroconvulsive Therapy
Emergency Services
Family Research
Geriatric Psychiatry
MIDAS Project
Mood Disorders Program
Partial Hospitalization Program
Outpatient Programs
Psychiatric Emergency Services
Recreation Therapy
Gambling Treatment Program
Neuropsychiatric Services
Adult Neuropsychology services
Pediatric Partial hospitalization program

Endnotes

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- ⁱ “Providence City: Profile of General Population and Housing Characteristics, 2010 Demographic Profile Data,” American Fact Finder, United States Census Bureau.
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1
- ⁱⁱ “Rhode Island, Profile of General Population and Housing Characteristics, 2010 Demographic Profile Data,” American Fact Finder, United States Census Bureau.
- ⁱⁱⁱ “Providence City: Profile of General Population and Housing Characteristics, 2010 Demographic Profile Data,” American Fact Finder, United States Census Bureau.
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1
- ^{iv} “Rhode Island, Profile of General Population and Housing Characteristics, 2010 Demographic Profile Data,” American Fact Finder, United States Census Bureau.
- ^v “Newport County QuickFacts from the US Census Bureau,” U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and county Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, May 23, 2013.
- ^{vi} “Rhode Island, Profile of General Population and Housing Characteristics, 2010, 2010 Demographic Profile Data,” American Fact Finder, United States Census Bureau.
- ^{vii} “United States, Profile of General Population and Housing Characteristics, 2010, 2010 Demographic Profile Data,” American Fact Finder, United States Census Bureau.
- ^{viii} “Providence city, Rhode Island,” Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, American Fact Finder, U.S. Census Bureau.
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- ^{xi} “Providence city, Rhode Island,” Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data, American Fact Finder, U.S. Census Bureau.
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^{cdvi} "Rhode Island Behavioral Risk Factor Surveillance System, 2011: Table 1. Risk Factors by ctycode (brfs11)." Special Report pulled by the Rhode Island Department of Health, March 26, 2013.

^{cdvii} "Rhode Island Behavioral Risk Factor Surveillance System, 2011: Table 1. Risk Factors by ctycode (brfs11)." Special Report pulled by the Rhode Island Department of Health, March 26, 2013.