Community Health Needs Assessment

THE MIRIAM HOSPITAL

September 30, 2019

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I. Introduction

A. Description of CHNA Purpose & Goals

The Miriam Hospital (TMH), located in Providence, Rhode Island, is a 247-bed nonprofit general acute care teaching hospital with university affiliation providing a comprehensive range of diagnostic and therapeutic services for the acute care of patients principally from Rhode Island and southeastern Massachusetts.[1] As a complement to its role in service and education, TMH actively supports research. TMH is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and participates as a provider primarily in Medicare, Blue Cross, and Medicaid programs. TMH is also a member of Voluntary Hospitals of America, Inc. (VHA).

Effective August 9, 1994, TMH and Rhode Island Hospital (RIH) of Providence, RI (719 beds) implemented a plan which included the creation of a not-for-profit parent company, Lifespan Corporation. Each hospital continues to maintain its own identity, as well as its own campus and its own name. Lifespan, the sole member of TMH and RIH, has the responsibility for strategic planning and initiatives, capital and operating budgets, and overall governance of the consolidated organization.

In addition to TMH and RIH, Lifespan's affiliated organizations also include Emma Pendleton Bradley Hospital (EPBH), Newport Hospital (NH), Gateway Healthcare, Inc. (Gateway), and Lifespan Physician Group, Inc. (LPG), as well as other organizations in support of Lifespan and its hospitals.

In 2010, the Patient Protection and Affordable Care Act (PPACA) specified requirements for hospitals to maintain recognition as Internal Revenue Code Section (IRC) 501(c)(3) non-profit hospital organizations.[2] Among many financial requirements, these regulations include a requirement to conduct a Community Health Needs Assessment (CHNA) at least every three years and to adopt an implementation strategy to meet the community needs identified in the CHNA.[3] CHNAs must utilize qualitative and quantitative data and feedback from key stakeholders and community members to determine the most pressing health needs of the community that a hospital serves. This group includes, among others, members of the medically underserved, low-income, and minority populations in the community cared for by the hospital facility. CHNA regulations specify that a CHNA should address not only financial barriers to care but also "the need to prevent illness, to ensure adequate nutrition, or to address social, behavioral, and environmental factors that influence health in the community."[4]

TMH conducted its first CHNA, dated September 30, 2013, which covered the period from October 2010 through September 30, 2013, to better understand the individual and community-level health concerns of the population that it serves. This process and its resultant findings were achieved through community involvement to determine TMH's significant health care needs. The CHNA encompassed intensive data collection and analysis, as well as qualitative research including interviews with members of the community and surveys of more than 100 internal and external stakeholders: hospital-based physicians,

nurses, social workers, administrators, and other professionals, and community-based stakeholders representing constituencies served by TMH. [5] The 2013 report and implementation strategy was distributed widely among Lifespan stakeholders, community partners, and the general public. Data collected produced a resultant implementation strategy to address significant needs specific to the community served by TMH. Progress on these strategies is reported in the 2016 CHNA.

Lifespan, on behalf of TMH, conducted its second CHNA, covering the three-year fiscal period from October 1, 2013 through September 30, 2016. The goals of that CHNA were to: (1) provide a review of what TMH had accomplished in addressing the significant needs identified in its implementation strategy included in the TMH's initial CHNA, dated September 30, 2013; (2) to define the community that TMH serves; (3) to assess the health needs of that community through various forms of research, community solicitation, and feedback; (4) to identify which of those needs assessed were of most significance to the community; (5) and to provide an implementation strategy that detailed how TMH would address those significant needs.

This report represents the third CHNA conducted by Lifespan on behalf of TMH, covering the fiscal period from October 1, 2016 through September 30, 2019. The goals of this CHNA are the same as those outlined above for 2016. The implementation strategy to be presented as a result of this CHNA will be used organizationally to guide hospital strategic planning over the next three years, October 1, 2019 through September 30, 2022.

A. History and Mission of The Miriam Hospital

As a founding member of the Lifespan health system, TMH is committed to its mission: *Delivering health with care*. The plan for the hospital began when a group of women began to raise the necessary funds to establish a hospital in Providence that would provide high-quality medical care for Jewish immigrants in an environment where their language and culture would be understood. Their vision was achieved in 1926, when TMH received a charter from the Rhode Island General Assembly and a sixty-three-bed hospital opened on Parade Street in Providence. On April 24, 1966, the broader Rhode Island community, served by a significantly expanded TMH, dedicated the 247-bed Summit Avenue facility that is home to today's hospital – advancing TMH's purpose "to serve all the people of Rhode Island regardless of race, creed, origin or economic means".[6]

To strengthen its core services of patient care, research, and medical education, TMH affiliated with The Warren Alpert Medical School of Brown University in 1969 – launching decades of active participation in medical education, as well as offering residencies and other educational opportunities in internal medicine and medicine subspecialties, general surgery and surgical subspecialties, psychiatry, emergency medicine, orthopedics, and dermatology. TMH is staffed by more than 1,200 affiliated physicians and in total, TMH employs more than 3,300 people.[7]

In 2017, Lifespan launched its new shared values that define how services are provided across all affiliates – **compassion**, **accountability**, **respect**, and **excellence** – four words that form the acronym C.A.R.E. and succinctly capture the substance of its mission. This acronym is serving as TMH's "true-north" guide, helping Lifespan become the best place to obtain care and the best place to work.

Furthermore, Lifespan identified eight core priorities that help focus its efforts on strategies that advance its commitment to improving the health and well-being of the people of Rhode Island and southeastern Massachusetts.

- ADVANCING ACADEMICS & RESEARCH: Advance clinical operations to train the next generation of clinicians, as well as advance research and the science of medicine.
- COMMITMENT TO THE COMMUNITY: Enhance corporate visibility; improve the health and wellness of the communities Lifespan serves.
- COST: Continue to work to reduce overall cost of care.
- PHILANTHROPY: Cultivate community relationships to enhance charitable contributions made to Lifespan to advance the mission and vision of the organization.
- PHYSICIAN PARTNERSHIP: Achieve outstanding collaboration with the system's aligned physician partners.
- QUALITY AND SAFETY: Achieve and maintain top decile performance in quality, safety, and patient experience.
- VALUE-BASED CARE: Continually improve quality and control cost to drive the value imperative.
- WORKFORCE: Recruit, retain, and engage top talent that is aligned with Lifespan's shared values to provide an extraordinary patient experience.

Table 1- The Miriam Hospital Statistics, FY 2018[8]

Year founded	1926
Employees	3,308
Affiliated physicians	1,214
Licensed beds	247
Patient Care	
Patient discharges	19,264
Emergency department visits	72,212
Outpatient visits	144,993
Outpatient surgeries	6,940
Inpatient surgeries	4,647
Financials	***($ in thousands)***
Net patient service revenue	$439,861
Research funding revenue	$19,744
Total assets	$497,912

B. Commitment to the Community

TMH continuously assesses community needs to ensure that its services are aligned with such needs. TMH regularly conducts assessments to examine growth and changes in the population served, community resources, and the changing prevalence of diseases, as well as patient experience with wait times, staffing levels, and changing standards of care. In recent years, in response to community needs, the hospital has introduced several new services and expanded others; examples include launching a robotic surgery program; becoming the first hospital in the region to use a new technology to remove clots in patients experiencing stroke; and opening Rhode Island's first Joint-Commission-certified Stroke Center[9] and the State's only Women's Cardiac Center.

During the fiscal year ended September 30, 2018, TMH provided more than $49 million in net community benefit expenses for its patients, which accounted for 10.5% of total operating expenses. TMH provides full charity care for individuals at or below twice the federal poverty level, with a sliding scale for individuals up to three times the poverty level.

TMH bills uninsured and underinsured patients using the prospective method, whereby patients eligible for financial assistance under TMH's Financial Assistance Policy are not billed more than "amounts generally billed", defined by the Internal Revenue Code Section §501(r) as the amount Medicare or Medicaid would reimburse TMH for billed care (including both the amount that would be reimbursed by Medicare or Medicaid, and the amount the beneficiary would be personally responsible for paying in the form of co-payments, co-insurance, and deductibles) if the patient was a Medicare fee-for-service or Medicaid beneficiary.[10] As part of its community benefit expenses, TMH provided almost $5.4 million in financial assistance at cost to patients (charity care), and over $10.6 million in medical and health professions education.[11]

TMH 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, community health training programs, patient advocacy, foreign language translation, physician referral services, and charitable contributions. TMH also subsidizes the cost of treating patients who receive government assistance that provides the hospital with health care reimbursements below cost – including low-income children and families, pregnant women, long-term unemployed adults, seniors, and people with disabilities covered under Medicaid.

Table 2- Net Cost of Charity Care and Other Community Benefits, FY 2018 [12]	***($ in thousands)***
Charity care	$5,390
Medical education, net	$10,562
Research	$2,845
Subsidized health services	$11,078
Community health improvement services and community benefit operations	$322
Unreimbursed Medicaid costs	$18,838
Total cost of charity care and other community benefits	$49,035

The Lifespan Community Health Institute (LCHI), with a mission to ensure that all people can achieve their optimal state of health through healthy behaviors, healthy relationships, and healthy environments, works with all Lifespan affiliates to achieve population health goals and partners extensively with TMH.

Lifespan, through the LCHI and its affiliates, coordinates hundreds of programs, events and community service activities that serve between 25,000 and 30,000 southern New Englanders annually. Programs are offered for free or at a reduced cost to the community and non-profit organizations.[13] In partnership with community-based agencies, LCHI led the design and development of the 2019 CHNA.[14]

Community and patient engagement are critical components of quality improvement and strategic planning for Lifespan Corporation and its affiliated hospitals. Lifespan launched the Community Health Reports and Resources site, a website in the spring of 2016 to describe and publicize the CHNA and implementation strategy process. This site, accessible from the Lifespan homepage, is maintained and houses each hospital's CHNA report and implementation strategy.[15] This site also serves as a conduit to link community residents and organizations to TMH's health-promoting initiatives.

C. The Miriam Hospital – Notable Achievements

TMH offers a range of medical services and has notable expertise in cardiac care, total joint replacement, bariatric surgery, minimally invasive and robotic surgery, and men's health. In 2019 TMH was recognized as a Best Regional Hospital and the top hospital in Rhode Island. As part of this achievement, TMH also attained a national ranking, with its Urology Program ranked 27th best in the country. TMH was classified as high performing in five areas: diabetes and endocrinology; gastroenterology and GI surgery; geriatrics; neurology and neurosurgery; and pulmonary and lung surgery.[16]

In 2019, TMH was included in the IBM Watson Health Top 100 Hospitals in the nation. As a major teaching affiliate of The Warren Alpert Medical School of Brown University, TMH was grouped by IBM Watson among the top 15 teaching hospitals in the United States.[17]

TMH is internationally recognized for its HIV/AIDS, behavioral health, and preventive medicine research. It receives more than $23 million in research funding annually.[18] TMH's clinical researchers excel at research involving brain disorders, cancer, heart disease, and mental health and developmental disorders—some of the nation's most prevalent conditions.

TMH has been a leader in cardiovascular care for over four decades and provides the highest level of care, whether the need is consultative, diagnostic, interventional, surgical, or rehabilitative. TMH cares for approximately 15,000 cardiac patients a year.[19]

Notable achievements in *clinical services* during the reporting periods representing the fiscal years ended September 30, 2017-2019 include[20,21]:

- Healthgrades, an online resource for information about physicians and hospitals across the nation, honored TMH as a recipient of the 2018 Distinguished Hospital Award for Clinical Excellence, joining 248 other hospitals across the country.
- TMH opened an Ostomy Center to provide compassionate care for patients confronting the physical and emotional challenges of managing an ostomy.
- TMH's Emergency Department established a clinical decision unit to alleviate overcrowding in the Emergency Department and the hospital, serving patients expected to stay less than 24 hours.
- TMH adopted ExpressCare, a service that provides around-the-clock access to expert adult and pediatric critical care transport teams to transfer patients between hospitals in a state-of-the-art ambulance.
- Dana-Farber Cancer Institute and the Lifespan Cancer Institute announced a strategic alliance to advance cancer treatment and research.
- TMH was recognized for its excellence in stroke care by the American Heart Association/American Stroke Association. TMH received a "Get with the Guidelines" Stroke Achievement Award with additional distinctions.
- Becker's Hospital Review listed TMH in its "Top 100 hospitals with great orthopedic programs".

Notable achievements in *research* during the reporting periods representing the fiscal years ended September 30, 2017-2019 include[22,23]:

- Researchers at RIH and TMH were awarded a $9.4 million federal grant to explore new treatments to combat antibiotic-resistant bacteria, an urgent public health concern. The National Institutes of Health (NIH) grant established a Center of Biomedical Research Excellence (COBRE) called the Center for Antimicrobial Resistance and Therapeutic Discovery.
- NIH awarded TMH $215,157 to study an innovative opioid addiction treatment program that serves prisoners in the Rhode Island correctional system.
- NIH awarded TMH a $9.1 million grant to continue initiatives at its Providence/Boston Center for AIDS Research, a collaboration among Lifespan, Brown University, and Boston University/ Boston Medical Center.
- TMH received a $2.5 million federal grant to partner with Project Weber/RENEW and the Rhode Island Public Health Institute to improve treatment for substance use and mental health treatment for gay and bisexual men.
- Josiah Rich, MD, an infectious disease physician and director of the Center for Prisoner Health and Human Rights at TMH, was elected to the 2018 class of the National Academy of Medicine, considered one of the highest honors in the fields of health and medicine.

Notable achievements in *safety, quality, and patient-centered care* during the reporting periods representing the fiscal years ended September 30, 2017-2019 include[24,25]:

- TMH was one of less than 1,000 hospitals nationwide awarded an "A" in the Leapfrog Hospital Safety Grades in both October 2017 and April 2018.
- For the second time, Lifespan's four hospitals— RIH, TMH, EPBH, and NH— achieved Top Performer status on the Healthcare Equality Index (HEI), a national benchmark of hospitals' policies and practices related to equitable and inclusive treatment of their LGBTQ patients, visitors, and employees.
- TMH was again named a Blue Distinction Center for Knee and Hip Replacement by Blue Cross Blue Shield of Rhode Island for its Total Joint Center. The Total Joint Center also earned The Joint Commission's Gold Seal for advanced certification of hip and knee replacement (one of only 32 programs nationwide) and was ranked "Best in Rhode Island" for total joint replacement by CareChex, a national nonprofit.
- Blue Cross Blue Shield of Rhode Island designated TMH a Blue Distinction Center+ for bariatric surgery for its expertise and cost efficiency in delivering specialty care.
- TMH's Newly Licensed Nurse Residency Program received accreditation with distinction as a "practice transition program" by the American Nurses Credentialing Center.
- Since 1998, TMH has been designated a MAGNET hospital for excellence in nursing by the American Nurses Credentialing Center. TMH has affiliations with fifteen college nursing programs under which it serves as a clinical training site.[26]
- TMH marked its twentieth anniversary of hospitalist service during the fiscal year ended September 30, 2018. Kwame Dapaah-Afriyie, MD, Director of the division, has led the group since its inception.

Notable *community investments* during the reporting periods representing fiscal years ended September 30, 2017-2019 include[27]:

- ❖ Lifespan and Tufts Health Plan were founding sponsors of JUMP Providence, bringing the first bike-share program to Providence.

During the annual Season of Giving, initiatives such as food and toy drives, collections of warm outerwear, and gingerbread house kit sales were organized to brighten the holidays for TMH neighbors in need. A new collaboration with Ocean State Job Lot in November 2018 yielded 50,000 pounds of food to supply pantries.

II. The Miriam Hospital – Defining the Community It Serves

TMH is located in Providence County, an area home to over 636,000 residents and covering almost 410 square miles. It is the most densely populated county in Rhode Island and includes the State's capital, Providence, which is in the center of the State and contains a large urban core. The population of Providence County is racially and ethnically diverse, and is slightly younger, on average, than the rest of Rhode Island.[28]

Table 3- Demographics estimates, July 1, 2018[29]	Providence City	Providence County	Rhode Island
Population estimates	179,335	636,084	1,057,315
% below 18 years of age	22.6%	20.5%	19.4%
% 65 and older	9.6%	15.3%	17.2%
% Non-Hispanic African American	15.6%	12.3%	8.4%
% American Indian and Alaskan Native	1.3%	1.4%	1.1%
% Asian	6.2%	4.5%	3.6%
% Native Hawaiian/Other Pacific Islander	0.2%	0.3%	0.2%
% Hispanic	42.0%	23.4%	15.9%
% Non-Hispanic white	34.3%	60.9%	72.0%
% Language other than English spoken at home*	49.5%	31.1%	22.0%
% Females	51.8%	51.3%	51.4%
Median household income*	$40,366	$52,530	$61,043
% Persons in poverty	26.9%	14.7%	11.6%
Persons per square mile**	9,676.2	1,530.3	1,018.1
% Persons without health insurance	12.5%	6.6%	5.5%

**2013-2017 estimates, **2010*

The median household income in Providence County is $52,530 and 14.7% of residents are living in poverty. More than 18% of residents are foreign-born, and more than 30% of families speak a language other than English in the home. Almost 84% of Providence County residents are high school graduates, and 64% of people are active in the workforce. According to the U.S. Census, 6.6% of Providence County residents are uninsured. [30]

The city of Providence, where over 22% of TMH patients reside, is far more densely populated and urban than the rest of Providence County. The demographics of the city of Providence when compared to its County also differ, with nearly 27% of city residents living in poverty and the racial mix of city inhabitants comprised of a higher percentage of African American, Asian, and Hispanic populations than compared to Providence County. The median household income in the city of Providence is significantly lower than the County and State median. According to 2018 estimates, there are nearly twice as many uninsured residents in the city of Providence when compared to Providence County and more than twice as many when compared to the state of Rhode Island.

The Miriam Hospital Patient Population

TMH's outpatient population is largely from Rhode Island; 92.7% of its outpatient encounters in the fiscal year ended September 30, 2018 reflect treatment of Rhode Island residents. Another 5.4% of the hospital's outpatient encounters involve patients from Massachusetts. Nearly half (45.8%) of THM outpatient population comes from Rhode Island's urban core: the largest concentration comes from Providence (15.1%), followed by Pawtucket (8.9%), Cranston (7.0%), and Warwick (6.4%).[31]

13.2% of TMH's outpatients reside in Rhode Island's East Bay communities, such as Bristol (3.3%), Barrington (2.1%), and Warren (1.9%), and approximately twelve other cities and towns from the East Bay, Aquidneck Island and nearby southeastern Massachusetts. Another 9.0% of TMH's outpatients reside in southern Rhode Island, with the largest concentration coming from Coventry (2.0%), East Greenwich (1.6%) and North Kingstown (1.6%). Of note, the share of TMH outpatients from the northwest region of the state more than doubled from the fiscal year ended September 30, 2015 (5.2%) to the fiscal year ended September 30, 2018 (11.8%), with the largest share (4.8%) residing in Woonsocket. *See Appendix A*[32]

The geographic distribution of TMH's inpatient population is similar to its outpatient population, with a slight shift toward patients coming in from outside of the urban core region. Of all inpatients, 93.3% came from Rhode Island. More than half (55.1%) come from the urban core, with 18.6% of all inpatients living in Providence, 11.1% living in Cranston, Warwick and West Warwick, and 25.4% living in the northern core, with the largest segment in Pawtucket (16.9%).[33]

In the fiscal year ended September 30, 2018, 86.6% of TMH patients spoke English as their primary language. The next most frequently spoken languages were Spanish (5.4%), Portuguese (1.1%), Cape Verdean Creole, (0.5%) and Russian (0.2%).[34]

Over ten percent (10.7%) of the patient population self-identified as Hispanic or Latino. Of those who identified as Hispanic or Latino, 57.0% considered their race to be "Other", 33.4% considered themselves "White or Caucasian" and 8.6% identified as "Black". Table 4 shows the racial breakdown of all ethnicities of the patient population in fiscal year ended September 30, 2018.[35]

Table 4- The Miriam Hospital Patient Race (All Ethnicities), 2015[36]	Inpatient Percent	Outpatient Percent
White or Caucasian	83.8%	82.4%
Black or African American	8.0%	7.2%
Asian	0.4%	1.0%
American Indian or Alaska Native	0.1%	0.1%
Native Hawaiian or Other Pacific Islander	0.1%	0.1%
Other	7.7%	9.2%
Total	100.0%	100.0%

III. Update on 2016 CHNA Implementation Strategy

TMH's previous CHNA, dated September 30, 2016, resulted in an implementation plan covering the period from October 1, 2016 through September 30, 2019 (fiscal years ended 2017-19). The CHNA findings reflected significant community input garnered through community forums, surveys, and key informant interviews. In addition, TMH reviewed hospital utilization data and public health trends to form its selection of implementation priorities.[37]

The 2016 CHNA report and the fiscal years' 2017-2019 implementation strategy were distributed widely among Lifespan stakeholders, community partners, and the public. Provided below is an update on progress made in addressing each of the needs identified in TMH's September 30, 2016 CHNA.

Access to Care and Health Literacy

Below are actions TMH took between October 1, 2016 and September 30, 2019 to address the identified significant need re: access to health care and health literacy:

A. Continue to invest in high-quality primary care in partnership with LPG and Metacom Medical Associates. TMH will support these practices as they grow their capacity and seek National Committee on Quality Assurance – Patient Centered Medical Home designation.
    - LPG Metacom Medical established a Patient Centered Medical Home (NCQA Level 3) in March 2018. Prior to joining Lifespan, this practice had achieved level 2 PCMH status in 2015 but with the infrastructure and support of LPG, this practice was able to achieve a higher level of distinction.

      Patients with chronic diseases such as diabetes and hypertension have benefited most by having a readily available PCMH primary care physician (PCP) office where patients are tracked closely by a physician, nurse care manager, and pharmacist to ensure staff are adequately controlling their patient's illnesses. The PCMH guidelines create a framework for managing these patient populations and

streamlining workflows. In addition, having the ability to generate reliable reports from the electronic medical record allows the practice to manage these disease states in partnership with the physician.

LPG Metacom Medical currently has over 3,000 active patients in its primary care practice, as well as a walk-in medical center at the practice that serves its patient panel and community patients. Approximately thirty primary care patients are seen each day along with twelve to fifteen patients at the walk-in area each day. A full-time physician was added to this practice during the fiscal year ended September 30, 2019 to assist in expanding access to primary care services to the TMH community.

B. Continue to explore collaborations with the Providence Community Health Center (PCHC), which provides quality primary health care services that are affordable, comprehensive, and culturally sensitive to more than 50,000+ residents of Providence in the TMH community.
   - Lifespan staff and clinicians partnered with PCHC to host the Mission of Mercy free dental clinic for Rhode Island residents without dental coverage on September 29-30, 2018 which resulted in:
     - 475+ community and professional volunteers;
     - 415+ patients served;
     - 2,000+ procedures performed; and
     - Donated services valued at over $376,000.
   - Lifespan staff and clinicians partnered again with PCHC to host the Mission of Mercy free dental clinic on September 28-29, 2019.
   - LCHI collaborated with PCHC to deliver a week-long introduction to LCHI's education and skill-building programs at PCHC's largest clinic site in 2018.
   - LCHI offered the CDC-approved Diabetes Prevention Program (DPP) to PCHC patients; PCHC providers helped refer into the program. In August 2019, the LCHI partnered with PCHC to launch a DPP cohort in Spanish, exclusively for PCHC patients, and held at one of the PCHC clinic sites; twenty-one patients enrolled.

C. Strategically expand the reach of the Healthwise health literacy program to correctional facilities, adult day centers, low-income residential housing, and adult learning centers.
   - Thirteen classes, 168 participants during the fiscal year ended September 30, 2017
   - Twenty classes, 237 participants during the fiscal year ended September 30, 2018
   - TMH did not deliver Healthwise in correctional facilities but instead partnered with its Lifespan affiliate, RIH, to open the Providence Transitions Clinic, which provides primary care and patient navigation for people who have recently been released from incarceration.

D. LCHI, in conjuction with TMH, continued to provide free lectures at community sites such as community centers, churches, and schools on topics related to health access and health literacy.
   - *Healthwise*: FY 2017- (13 classes, 168 participants), FY 2018- (20 classes, 237 students);
   - Financial Literacy: FY 2017- (2 classes, 16 students), FY 2018- (7 classes, 218 students), FY 2019 through July- (3 classes, 412 students);
   - Food is Medicine: FY 2017- (2 classes, 10 students), FY 2018- (4 classes, 42 students), FY 2019 through July- (9 classes, 74 students);
   - Food demonstrations: FY 2017- (34 events, 664 participants), FY 2018- (23 events, 431 participants), FY 2019 through July- (2 events, 20 participants);
   - Safe Sitter: FY 2017- (31 classes, 277 students), FY 2018- (38 classes, 325 students), FY 2019 through July- (17 classes, 186 students); and
   - Community health lectures: FY 2017- (23 lectures, 1,048 participants), FY 2018- (8 lectures, 96 participants), FY 2019 through July- (30 lectures, 737 participants).

E. Educate the community about TMH's charity care and financial assistance policies and procedures, so that those who require assistance receive quality medical care regardless of their ability to pay.
   - TMH prints the links to its financial assistance policy (FAP) and FAP-related documents on all hospital bills.[38]
   - TMH organized a free community presentation by Lifespan's Patient Financial Services Department on September 12, 2017 to help explain hospital charity care and billing procedures.

F. Explore establishing an 'Ask the Doctor' panel to incorporate at community events, quarterly, focused on addressing issues of access to care and health literacy.
   - In lieu of organizing quarterly 'Ask the Doctor' panels, a TMH internist, Dr. Mark Paulos, launched the *Walk with a Doc* walking program. *Walk with a Doc* provides an opportunity for the general public to walk at their own pace and have their questions answered by a local physician. The intention is to promote healthier lifestyles and improve general health. Dr. Paulos launched this with an information session at RIH in May 2019; walks begin at a park in Providence and are generally occur twice a month on Saturday mornings.

G. Continue to offer community-based biometric screenings and flu clinics for low, income and uninsured residents, in partnership with LCHI, to promote primary prevention, with appropriate referrals to treatment.
   - Blood pressure screenings: FY '2017- (15 events, 208 screened), FY '2018- (26 events, 445 screened), FY '2019 through July 2019- (39 events, 580 screened);
     Glucose screenings: FY '2017- (8 events, 273 screened), FY '2018- (20 events, 432 screened), FY '2019 through July 2019- (26 events, 335 screened);
   - Flu clinics: FY '2017- (34 clinics, 684 vaccinated), FY '2018- (45 clinics, 792 vaccinated), FY '2019 through July 2019- (33 clinics, 647 vaccinated).

H. Continue to provide CPR & First Aid training in partnership with the LCHI's Community Training Center at TMH.
   - Certified CPR courses: FY '2017- (84 courses, 734 participants), FY '2018- (107 courses, 886 participants), FY '2019- (97 courses, 705 participants); and
   - Non-certified CPR courses: FY '2017- (23 courses, 331 participants), FY '2018- (29 courses, 381 participants), FY '2019- (18 courses, 278 participants).

Cardiac Health

Below are actions TMH took between October 1, 2016 and September 30, 2019 to address the identified significant need of cardiac health:

A. Provide "Working Healthy" lectures that focus on cardiac health. "Working Healthy" is part of Lifespan's employee benefit program.
   - During the fiscal years ended September 30, 2017 through September 30, 2019, "Working Healthy" continued to offer educational programs as part of Lifespan's employee benefit program.

B. Create a "Couch to 5K" program for patients and community members who are interested in increasing their physical activity to improve cardiac health.
   - The "Couch to 5K" program was offered two to three times during each of the last three years.

C. Continue to provide community-based CPR (both certified and non-certified) and AED training through the Community Training Center at the LCHI.
   - Certified CPR courses: FY '2017- (84 courses, 734 participants), FY '2018- (107 courses, 886 participants), FY '2019 through July 2019- (97 courses, 705 participants); and
   - Non-certified CPR courses: FY '2017- (23 courses, 331 participants), FY '2018- (29 courses, 381 participants), FY '2019 through July 2019- (18 courses, 278 participants).

D. Continue to provide free blood pressure screenings for low-income and uninsured residents, with appropriate referrals to treatment.
   - LCHI offered blood pressure screenings: FY '2017- (15 events, 208 screened), FY '2018- (26 events, 445 screened), FY '2019 through July 2019- (39 events, 580 screened);

E. Continue to provide and promote tobacco prevention and cessation programs.
   - LCHI became trained and enrolled as a "Quitworks" referring agency. These agencies refer community residents to free tobacco cessation programs and support including counseling and medication-assisted treatments;
   - LCHI continued to deliver two "Tar Wars" educational programs for eighty-six elementary school students during fiscal year ended September 30, 2018;

- Lifespan revised and reissued its system-wide Tobacco Free policy on May 31, 2018 and provided education, signage, and cessation supports to employees, patients, and visitors.

F. Continue to host Overeaters Anonymous group meetings on site at TMH.
   - Demand for the Overeaters Anonymous support group diminished so the group discontinued its meeting.

G. Consider providing additional bike racks for patients and staff to encourage active commuting and participate in annual "Bike to Work Day" activities each May.
   - The Lifespan system is one of two sponsors of a city-wide Bike Share program that launched during the fiscal year ended September 30, 2018 (the first in Rhode Island), bringing hundreds of bikes and new bike stations to the City of Providence, including several bike stations within walking distance of TMH to encourage biking to work.

Cancer

Below are actions which TMH took between October 1, 2016 and September 30, 2019 to address the identified significant need for cancer care:

A. Continue to provide free community-based education programs such as Avenues of Healing, tobacco cessation programs, Kick Butts Day, and Cancer Survivors Day events.
   - Avenues of Healing was delivered on October 21, 2017 with 124 attendees, and again on October 13, 2018 with 225 attendees. The 2019 Avenues of Healing event will be held on October 12, 2019.
   - Cancer Survivors Day was held on September 17, 2017 with 287 participants on September 23, 2018 with 239 participants, and again on September 22, 2019 with 259 participants
   - The LCHI delivered two "Tar Wars" educational sessions for 86 elementary school students during fiscal year ended September 30, 2018;
   - LCHI hosted a free community lecture on colorectal cancer screening options on January 9, 2018.
   - **"**Breast Cancer and African-American Women" community lecture on November 1, 2016;
   - "80% by 2018 & Beyond" community lecture on colorectal cancer screening options January 9, 2018;
   - "CT Screening for Lung Cancer: How to Save Lives and Stop Cigarette Smoking in Rhode Island" community lecture on February 12, 2019;
   - "Preventable. Treatable. Beatable: Reduce your risk for colorectal cancer" community lecture on March 12, 2019.

B. Expand community partnerships to reach underserved populations and improve access and screening through programs like "See, Test, & Treat", and partners such as the American Cancer Society.
   - Fiscal year ended September 30, 2017 Skin Check (skin cancer) screenings: eight events, 509 screened;
   - Fiscal year ended September 30, 2018 Skin Check (skin cancer) screenings: nine events, 630 screened;
   - Fiscal year ended September 30, 2018 Colon cancer screening: two events, twenty-one screened;
   - Fiscal year ending September 30, 2019 Skin Check (skin cancer) screenings: seven events, 515 screened. Partnered with the American Cancer Society on many events:
     - Avenues of Healing, annually
     - Making Strides Against Breast Cancer Screening, annually
     - Skin Check skin cancer screenings, annually
     - Colorectal cancer awareness activities during the fiscal year ended September 30, 2019
     - LCI's "Rising Above Cancer" 5K walk/run and fundraiser, annually
     - National Cancer Survivors Day celebration, annually

C. Continue to host the State's only support group for deaf and hard of hearing breast cancer survivors.
   - TMH has not had enough social work staff to continue to host this group.

D. Expand the capacity of the Breast Health Navigator Initiative of the LCI. Consider providing navigator services at community health events twice a year.
   - TMH utilizes navigators who help support community programs such as the Gloria Gemma Foundation and Avenues of Healing events.

E. Strengthen disease site expertise through recruitment and retention of clinicians and work with the Lifespan Office of Research Administration (ORA) to increase the recruitment of underserved populations to research trials.
   - On March 21, 2017, Lifespan and the Dana-Farber Cancer Institute created a strategic alliance to advance cancer treatment and research. The agreement supports the expansion of clinical trials, offers access for Lifespan physicians to cancer-specific disease expertise for complex cases, and creates a program to coordinate the treatment of bone marrow transplant patients, with transplants provided in Boston at Dana-Farber/Brigham and Women's Cancer Center and care surrounding the transplant in Rhode Island at Lifespan. The two organizations also agreed to use the same clinical trials management platform, resulting in better care coordination.

F. Improve patient access, patient experience, and communications, including establishing a Telephone Triage Center to serve as "one-stop shopping" for medical oncology and infusion patients.
   - A single point of entry LCI telephone response and triage line was established during the fiscal year ended September 30, 2017 and continued throughout the fiscal year ended September 30, 2019, improving response times and patient satisfaction with respect to accessing their oncology providers.

Healthy Food Access

Below are actions TMH took between October 1, 2016 and September 30, 2019 to address the identified significant need of healthy food access:

A. Increase the number of participants in "Food is Medicine" classes and begin offering classes in Spanish.
   - The LCHI built out a demonstration kitchen in its office that allows for healthy cooking classes. The kitchen was completed in June 2017.
   - Food is Medicine is a 4-week program developed by a research dietician that teaches residents how to implement a plant based diet through a fun cooking program featuring extra virgin olive oil, whole grain and legumes. The evidence-based program teaches healthy eating on a budget; the average cost per serving is $1.26. LCHI delivers this program at its office using its demonstration kitchen.
     - Two Food is Medicine classes for ten individuals during the fiscal year ended September 30, 2017;
     - Four Food is Medicine classes for forty-two individuals during the fiscal year ended September 30, 2018;
     - Nine Food is Medicine classes for seventy-four individuals thru July of the fiscal year ended September 30, 2019.
   - LCHI also conducted cooking demonstrations with nutrition education at community locations, at the request of community partners.
     i. Twenty-nine cooking demonstrations for 501 individuals during the fiscal year ended September 30, 2017;
     ii. Twenty-seven cooking demonstrations for 451 participants during the fiscal year ended September 30, 2018;
     iii. Two cooking demonstrations for 20 participants thru July of the fiscal year ended September 30, 2019.

B. Continue to provide free community lectures on nutrition and healthy weight, as follows.
   - "Mindfulness Interventions for Blood Pressure", held on November 14, 2017;
   - "The Power of a Plant-Based Diet", held on May 8, 2018.
   - "Hunger is a Healthcare Issue", October 9, 2018.

C. Join the *RI Healthcare Local Food Challenge*, which encourages Rhode Island hospitals and health centers to purchase and provide local sourced, healthy food options along with consumer education in their cafeterias.
   - Based on unforeseen food safety requirements encountered while determining how to implement this type of program in a hospital setting, various obstacles prevented TMH from moving forward with this initiative.

D. Begin offering the Center for Disease Prevention and Control's proven effective Diabetes Prevention Program (DPP), which teaches people at risk of developing diabetes how to prevent the condition through diet and exercise.
   - LCHI became a CDC-certified DPP provider and launched three year-long cohorts in the fiscal year ended September 30, 2018: two in November 2017 and one in January 2018. A fourth cohort began in August 2019.

Substance Use Disorders

Below are actions TMH took between October 1, 2016 and September 30, 2019 to address the identified significant need of substance use disorders:

A. Increase the proportion of people treated in the TMH Emergency Department (ED) for overdose who engage the services of a Certified Peer Recovery Specialist to seek treatment. Since the fiscal year ended September 30, 2014, TMH has offered the services of Certified Peer Recovery Specialists to people who survive an opiate overdose, right at their point of entry into the Emergency Department. In September 2015, in partnership with AnchorED, those services were extended to 24 hours a day, 7 days a week to meet the increasing demand.
   - TMH continues to offer peer recovery coaches in its ED 24/7, yielding 178 hospital contacts during the fiscal years ended September 30, 2018 and 2019.

B. As a teaching hospital, train residents to become approved prescribers of medication-assisted treatment, e.g. methadone and buprenorphine.
   - In June 2017, RIH, a fellow Lifespan teaching hospital, in conjunction with The Warren Alpert Medical School of Brown University, opened a free-standing Recovery Center in Providence and a Recovery Clinic in its Center for Primary Care for patients with substance use disorder. At each of these sites, residents are being trained to attend to substance use disorder with medication-assisted treatment.

C. Work with the Rhode Island Department of Health and Prevent Overdose RI to prepare and maintain a listing of free therapeutic groups available to the community.
   - TMH did not do this because it would have been a duplication of effort. A State law was passed in 2018 requiring substance use prevention education in health education curricula. Consequently, the University of Rhode Island's College of Pharmacy, Rx for Addiction and Medication Safety (RAMS) program launched a new resource website to help meet the new Rhode Island law (2018-H 7987).

D. Continue to provide free community lectures and conferences, such as Parenting Matters and Temas Familiares, on topics related to substance use prevention, treatment, and mental health.
    - Parenting Matters Workshop on October 19, 2017, 123 participants
    - Temas Familiares Conference on November 4, 2017, 42 participants
    - Parenting Matters Workshop on November 9, 2017, 50 participants
    - "Understanding the Opioid Epidemic in RI: Treatment Challenges and Strategies" community lecture on February 3, 2018
    - Parenting Matters Conference on March 24, 2018, 240 participants
    - Parenting Matters Conference on March 23, 2019, 196 participants
    - Temas Familiares Workshop on May 4, 2019, 42 participants
    - "Working with Grieving Children, Teens and Families" community lecture on June 11, 2019
    - "Cultural Considerations when Working with the Latino Population" community lecture on July 9, 2019

E. Begin offering Mental Health First Aid (MHFA) to the public and first responders in the TMH service area. Mental Health First Aid is an innovative eight-hour course that trains people to recognize the signs and symptoms of common mental health disorders, to provide immediate initial on-site help, and to guide individuals toward appropriate professional assistance. Behavioral health and mental health disorders often co-occur, so it is important to address mental health concerns as a preventive technique with behavioral health disorders like substance use.
    - Mental Health First Aid (MHFA) consistently expanded the courses offered and participants served during the reporting period. Classes increased from twenty-one (302 participants) during the fiscal year ended September 30, 2017, to thirty-three (511 participants) during the fiscal year ended September 30, 2018, and then doubled to sixty-six classes (1,062 participants) held during the fiscal year ended September 30, 2019.

IV. Assessment of Health Needs of The Miriam Hospital Community

The CHNA process involved the integration of information from a range of data sources to identify the significant health needs of the community served by TMH, prioritize those needs, and identify resources, facilities and programs to address the prioritized needs. Both qualitative primary data and secondary quantitative data were gathered to identify the significant health needs of the community.

The primary data sources include community health forums, key informant interviews, and individual surveys. Secondary data sources include national and local publications of state-specific data. These sources vary in sample size, method of data collection and measures reported, but all are publicly available sources and, in each case, the most recent publicly accessible data is presented. The data sources are described in more detail below.

Community Health Forums

Qualitative data was collected through Community Health Forums (CHFs) to solicit input from individuals representing the broad interests and perspectives of the community. Participants in the CHFs included members of the medically underserved, low-income, and minority populations in the TMH service area.

Community forums are a standard qualitative social science data collection method, used in community-based or participatory action research. According to Berg, et al., this approach "endorses consensual, democratic and participatory strategies to encourage people to examine reflectively their problems or particular issues affecting them or their community."[39]

Six CHFs were held between April 30 and June 21, 2019 across the TMH service area, with 62 participants. Participants were recruited using social media, posted flyers, email, and word of mouth. Locations were selected to be easily accessible to the public and hospital patients, and forums were held at various times of the day on weekdays and weekends. TMH forums were held at community centers, a recreation venue, a senior housing complex, a community-based service organization, and TMH. At each forum, a full meal was provided, along with child care and interpretation if requested in advance. All CHFs were open to the public and participants were fully engaged throughout the 90-minute discussions. *See Appendix B.*

A representative of TMH served as a hospital liaison to help plan and facilitate the CHFs. The hospital liaison was a critical link between the LCHI as the coordinating body, the expertise and resources within the hospital, and the Community Liaisons described below.

An important and unique component of the CHFs was the involvement of Community Liaisons. Three people representing the diverse populations served by TMH were hired as consultants to assist with the CHNA. These Community Liaisons helped plan the CHFs, recruited participants, and co-facilitated the forums. Appendix C, contains a bio-sketch for each of the TMH Community Liaisons. All Community Liaisons were chosen through a competitive selection process and completed a two-hour training prior to leading the CHFs. The training included project planning tips, role-playing activities, conflict management strategies, and logistical expectations. Community Liaisons were responsible for identifying an accessible community venue for each forum, selecting a food vendor and menu that would be appealing to the target audience, and co-facilitating the discussion at the CHF with their hospital liaison.

Each CHF was two hours in duration and followed a similar format that began with a meal, followed by a 90-minute discussion, co-facilitated by the hospital and Community Liaison, that generated consensus on the participants' health concerns, their prioritization of those concerns, and their ideas for how TMH could respond to those concerns. Discussion began with a brief presentation of TMH's 2016 CHNA priorities and examples of activities the hospital has performed in response. Participants were invited to share their reactions to what was presented as well as their current health concerns. See Appendix D for a sample CHF agenda. The input gathered during the CHFs was assessed qualitatively to extract

themes and quantitatively to determine the frequency with which those themes were cited. Community Liaisons also met with the LCHI and the hospital liaison to debrief the forums and offer their interpretation of the findings to ensure that all input was captured and priorities were appropriately aligned.

Hiring, training, and empowering community members to serve as Community Liaisons in the CHNA process enriched the quantity and quality of community input. It also allowed TMH to build relationships with communities that might not otherwise have become aware of or engaged in the needs assessment process.

Individual Surveys

To broaden the reach of community input, surveys were distributed and collected by LCHI staff at events they attended in May and June 2019, such as the annual Pride festival. The surveys addressed the same questions as the CHFs (See Appendix E for the survey). Six individual surveys were received for TMH.

Key Informant Interviews

The director of the LCHI identified public health and health policy leaders who could inform the 2019 CHNA process and who had knowledge, information or expertise about the community that TMH serves. Key informant interviews were conducted with the state leaders to supplement the other quantitative and qualitative data collected. Key informants include the:

- Acting Chief of Staff, Executive Office of Health and Human Services, State of Rhode Island, and Policy Director, Rhode Island Children's Cabinet
- Director of Policy, Planning, and Research, Executive Office of Health and Human Services, State of Rhode Island
- Director, Health Equity Institute and Special Needs Director, Rhode Island Department of Health
- Physician Lead, Health Equity Institute, Rhode Island Department of Health

When crafting the TMH implementation strategy, TMH reflected upon the key themes that emerged from these conversations. The statewide priorities and recommendations of the key informants included: incorporate health equity targets; generate and monitor data on health disparities, especially by race, ethnicity and income; build strategies that incorporate the social determinants of health; go beyond individual interventions to family/household level interventions; make investments in early childhood; consider co-morbidities, especially between behavioral health and chronic diseases; confront racism and bias to improve care; provide personalized care; be sensitive to misalignments between systems of care; and continue to address substance misuse and behavioral health conditions.

TMH Patient Data, 2016-2018

Lifespan's Planning Department analyzed TMH patient data on patients, discharges, and encounters, disaggregated by town of residence, age, race, ethnicity, and language spoken for fiscal years ended September 30, 2016 through September 30, 2018. This inpatient, outpatient and ED data is important for understanding trends in utilization of hospital services.

The Commonwealth Fund 2019 Scorecard on State Health System Performance – Rhode Island, 2019[40]

The Commonwealth Fund Scorecard on State Health System Performance identifies places where health care policies are on track and areas that need improvement. Using the Scorecard, states can compare how their performance stacks up against all others. In the most recent edition, released in June 2019, Rhode Island was the state that improved the most on the health system performance indicators tracked over time; Rhode Island improved on 21 indicators, worsened on seven, and had little or no change on 15. Rhode Island particularly made strides in the areas of coverage and behavioral health. The state uninsured rate among adults dropped from 17% in 2013 to 6% in 2017. In addition, the percentage of adults with any mental illness reporting an unmet need dropped from 27% in 2010–11 to 17% in 2014–16. The state also saw significant reductions in the percentage of children with unmet mental health needs. The childhood overweight and obesity rate improved to 31% (vs. 36% in 2016). However, the prevalence of adults who are overweight and obese worsened (31% in 2017 vs. 27% in 2016), as did preventable hospitalizations among adults ages 65+ (212.2 per 1,000 Medicare beneficiaries). At #41, Rhode Island was also among the bottom-ranked states for drug poisoning deaths.

Rhode Island Kids Count Factbook, 2019[41]

Published annually since 1995, The Rhode Island Kids Count Factbook is the primary publication of Rhode Island Kids Count. The Factbook provides a statistical portrait of the status of Rhode Island's children and families, incorporating the best available research and data. Information is presented for the state of Rhode Island, each city and town, and an aggregate of the four core cities (cities in which more than 25% of the children live in poverty): Providence, Central Falls, Pawtucket and Woonsocket. Of note, three of the four core cities are in the TMH primary service area. The Factbook tracks the progress of 71 indicators across five areas of child wellbeing: Family & Community, Economic Wellbeing, Health, Safety, and Education.

Governor Gina Raimondo's Overdose Prevention Action Plan[42]

In 2015, Rhode Island Governor Gina Raimondo issued Executive Order 15-14 to establish the Overdose Prevention and Intervention Task Force in response to the significant toll that the opioid epidemic was taking on Rhode Islanders. Initially, the task force's goal was to reduce opioid overdose deaths by one-third within three years. The task force developed a strategic plan with four pillars: prevention, treatment, rescue and recovery. In 2019, the task force issued an update to its strategic plan that retained the original four strategy pillars and added five new core principles that place additional emphasis on prevention and recovery. The five cross-cutting principles are: (1) Integrating Data to Inform Crisis Response, (2) Meeting, Engaging and Serving Diverse Communities, (3) Changing Negative Public Attitudes on Addiction and Recovery, (4) Universal Incorporation of Harm-Reduction, and (5) Confronting the Social Determinants of Health.[43] Rhode Island experienced a decline in overall overdose deaths, from 336 in 2016 to 314 in 2018.[44]

Rhode Island State Innovation Model (SIM) Test Grant, 2015-2019[45]

Rhode Island was selected to participate in a multi-year State Innovation Model (SIM) grant intended to "improve health system performance, increase quality of care, and decrease costs for Medicare, Medicaid and Children's Health Insurance Program (CHIP) beneficiaries..." Rhode Island received a $20 million award during the fiscal year ended September 30, 2015 to test its health care payment and service delivery reform model over four years. The goal of the project was to achieve the "triple aim" of better care, healthier people, and smarter spending, through a value-based care lens. Governed by an interagency team and a steering committee on which Lifespan was represented, the Rhode Island SIM project developed a theory of change that focuses more on value and less on volume: If Rhode Island SIM makes investments to support providers and empower patients to adapt to these changes, and we address the social and environmental determinants of health, then we will improve our population health and move toward our vision of the "Triple Aim."

Rhode Island Department of Health Strategic Framework[46]

In 2015, Dr. Nicole Alexander-Scott, Director of the Rhode Island Health Department (RIDOH), issued the RIDOH Strategic Framework, the department's blueprint for reducing health disparities and achieving health equity in Rhode Island. The three leading priorities in the framework are: (1) Address the social and environmental determinants of health in Rhode Island, (2) Eliminate the disparities of health in Rhode Island and promote health equity, and (3) Ensure access to quality health services for Rhode Islanders, including our vulnerable population. Twenty-three population health goals are distributed across five strategies. The third strategy relates to health care: "Promote a comprehensive health system that a person can navigate, access, and afford." RIDOH's population health goals for this strategy are to improve access to care, including physical, oral, and behavioral health systems; improve healthcare licensing and complaint investigations; expand models of care delivery and healthcare payment focused on improved outcomes; build a well-trained, culturally competent, and diverse health system workforce to meet Rhode Island's needs; and increase patients' and caregivers' engagement within the care system.

RIDOH Health Equity Zones

The RIDOH Strategic Framework highlights the state's *Health Equity Zones* (HEZ), which are geographic areas designed to achieve health equity by eliminating health disparities using place-based strategies to promote healthy communities.[47] The RIDOH selected a first cohort of 11 HEZ in April 2015 (two subsequently ceased the contract with the RIDOH before the first project period concluded) and a second cohort of three new HEZ in May 2019. The HEZ are charged with forming community-led collaboratives, conducting baseline needs assessments, creating plans of action, and implementing & evaluating those plans of action. The RIDOH expects hospitals and HEZ to partner on clinical-community linkages to improve population health at local levels.[48]

Behavioral Risk Factor Surveillance System – Rhode Island, 2018

The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collect state data about adult residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. A partnership between the Centers for Disease Control and Prevention and each state's

department of public health, the survey is conducted annually by phone to land lines and cell phones.[49] Rhode Island's goal is to interview 5,830 respondents, with 55% of those interviewed on a cell phone.[50] The BRFSS collects information from Rhode Island adults (18+ years) as part of an effort to address key national health indicators and state priorities. Survey topics include self-reported health status, health care access, fruit and vegetable consumption, risk behaviors, chronic disease burden, and physical activity, among others.[51]

Kaiser Family Foundation State Health Facts – Rhode Island, 2019[52]

State Health Facts is a project of the Henry J. Kaiser Family Foundation and provides free, up-to-date, and easy-to-use health data for all 50 states, the District of Columbia, and the United States. State Health Facts is comprised of more than 800 health indicators from a variety of public and private sources, including Kaiser Family Foundation reports, public websites, government surveys and reports, and private organizations. Data presented on State Health Facts are updated or added as new data become available; the update schedule varies from indicator to indicator.

County Health Rankings – Providence County and RI, 2019[53]

The *County Health Rankings & Roadmaps* program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The annual *County Health Rankings* provide a revealing snapshot of how health is influenced by where we live, learn, work and play. The rankings compare counties within each state on more than 30 health-influencing factors such as housing, education, jobs, and access to quality health care.

Rhode Island Department of Health Statewide Health Inventory, 2015[54]

The Statewide Health Inventory study was designed to evaluate access and barriers to medical services in the state. The *Hospital Survey* included information about patients' primary residence location, insurance sources for patients, census and visit data for fiscal year 2014, demographics about patients, interpreter services, staffing by specialty and service category, outpatient specialty clinics and services for calendar year 2014, and information technology, in addition to other data elements. The survey was informed by the Centers for Disease Control and Prevention's "National Hospital Care Survey Facility Questionnaire" and the American Hospital Association's "AHA Annual Survey of Hospitals." Findings were reported in the categories of Outpatient Care, Hospitals, Long-term Care, Facilities & Centers, and Patients & Community. The RIDOH expects to complete an update to the inventory in 2020.

Rhode Island Behavioral Health Project Report, 2015 (Truven Analytics)[55]

Prepared for the Rhode Island Executive Office of Health and Human Services, Department of Health, Department of Behavioral Health, Developmental Disabilities, and Hospitals, and the Office of the Health Insurance Commissioner, Truven Analytics published findings and recommendations for improving behavioral health in Rhode Island through a public health approach.

Critical Need Identification and Priority Ranking

The CHNA process required TMH to synthesize, interpret and prioritize the varied data collected. Existing TMH and Lifespan-specific service line expertise also factored into the selection and prioritization process.

Interpreting and prioritizing all relevant data was the responsibility of a steering committee comprised of the Community Liaisons, TMH Liaison, LCHI leadership, TMH leadership, and Lifespan leadership. Representatives of these stakeholder groups met multiple times to analyze the data, prioritize the significant health needs, and craft responsive strategies in order for TMH to effectively allocate its resources to improve the health status of the communities it serves. During the discussions, the needs were prioritized based on: the importance identified by the community; the scope, severity or urgency of the need as identified by the community and the data; and the estimated ability of TMH to provide effective interventions.

Other health concerns identified during this process will continue to be considered and evaluated as opportunities to share with other organizations that are better equipped to respond to those needs or for future TMH strategies.

The prioritized, significant health needs resulting from the TMH 2019 CHNA are:

Priority 1: Access to Care
Priority 2: Healthy Weight and Nutrition
Priority 3: Cancer
Priority 4: Outreach and Education
Priority 5: Mental and Behavioral Health

V. Identification of The Miriam Hospital's Community Significant Health Needs

Based on the extensive review, evaluation, and discussion of the qualitative and quantitative data collected through the CHNA process conducted on behalf of TMH, five significant health needs facing the community served by TMH have been identified. The methodology used to determine which health needs facing community have been determined to be significant and the process of prioritizing by order of significant to the community is described in Section IV of this report. Section V focuses on TMH's prioritized significant health needs in further detail and identifies specific resources, facilities, and programs within the community, including those at TMH, that are potentially available to address these significant health needs.

1. Access to Care

Access to health services improves the timely use of personal health services to achieve the best health outcomes. Disparities in access to health services affect individuals and populations. Barriers to services include:

- Lack of availability
- Out-of-pocket costs
- Transportation
- Language access
- Lack of insurance coverage[56]

In the last RIDOH *Statewide Health Inventory* (2015), when asked to rank community health issues, the majority of respondents reported that making health care more affordable (79.5%) and increasing access to health care (69.9%) were of extreme importance.[57]

Being able to access and afford health care when needed is a fundamental element of our nation's health care system. Health insurance rates are one measure of access to health care. In 2014, the Affordable Care Act expanded access for many millions of Americans by creating health insurance marketplaces and allowing states to expand Medicaid eligibility for residents. The uninsured rate in Rhode Island in 2018 was 3.7%, down from 4.2% in 2016.[58] At the end of 2017, 2.1% of Rhode Island's children under age 19 were uninsured.[59] According to the 2019 Commonwealth Fund Scorecard on State Health System Performance, Rhode Island ranked #3 in the nation in 2019 for affordability and accessibility. This rating is based on overall performance and also percent change on indicators related to health care access. However, much improvement can still be made, especially in reducing disparities by income, race and ethnicity. If Rhode Island's performance improved to the same level as the top performing state in the nation, 15,625 more Rhode Island adults and children would be insured, 33,603 fewer adults would skip needed care because of cost, and 19,890 fewer employer-insured adults and elderly Medicare beneficiaries would seek care in the Emergency Department for non-emergent or primary-care-treatable conditions.[60]

Adequate access to primary care services is essential to improving population health. It enables patients to have a source of care that leads to positive health outcomes. As the Institute of Medicine defines it, "primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community."[61] Without primary care access, patients may not receive appropriate care in a timely manner. The scope of primary care includes preventive care that can help to keep patients healthier in the long term, disease management, and the identification of needed behavior changes to maintain health throughout the lifespan.

One of the RIDOH's five strategies in its *Strategic Framework* is to promote a comprehensive health system that a person can navigate, access, and afford with the improvement of access to care as one of its twenty-three population health goals.[62] Access is difficult without a strong PCP base. Consistent care along the continuum is also important as patients transition through the age spectrum. For example, consistently linking postpartum patients with a PCP

will ensure that the issues identified during pregnancy than can be indicators of future health-care problems (e.g. gestational diabetes) are addressed in a timely manner.

Without a consistent primary care connection, patient care can become fragmented, resulting in inconsistent treatment and poor outcomes. The total full-time equivalents (FTE) of primary care physicians in the state of Rhode Island was 602.7 in 2014, the last year in which the RIDOH completed a provider inventory. That figure, according to national recommendations, is 10% fewer than the current demand.[63] Increasing access to primary care can improve long-term population health outcomes and health equity.

A Health Professional Shortage Area (HPSA) and Medically Underserved Area/Population (MUA/P) are designations by the Health Resources and Services Administration (HRSA). These designations identify geographic areas with populations in need of primary care, dental, or mental health providers. The three criteria for a HPSA that determine its score are: (1) population to provider ratio; (2) percentage of the population whose family income falls below 100% of the Federal Poverty Level (FPL); and (3) estimated travel time to the nearest source of care outside the HPSA. The first criterion holds the greatest weight in the scoring.[64] There are four primary care HPSAs, four dental care HPSAs, and three mental health HPSAs in TMH's primary service area, suggesting significant challenges with access to care.[65]

A MUA/P designation depends on the Index of Medical Underservice (IMU) score. An IMU score is calculated based on: (1) population to provider ratio; (2) percentage of the population whose family income falls below 100% of the FPL; (3) percentage of the population over 65 years of age; and (4) the infant mortality rate. The IMU score ranges from 0 to 100 where 62 or below qualifies as MUA designation. There are three MUA in TMH's service area with IMU scores ranging from 54.2 – 61.9.[66]

Recruiting primary care, dental, and mental health providers in Rhode Island represents a challenge due to the relatively low reimbursement and payment rates within the state. Due to the physician shortage, Rhode Island must compete regionally and nationally for providers. Nationally, there is a current and projected shortage of PCPs.[67] This shortage is expected to grow as the population ages and the corresponding need for services grows. Individuals over 65 years-old seek care from PCPs at twice the rate of the younger population, while at the same time, the supply of PCPs is expected to diminish as existing PCPs retire.[68] In addition, younger PCPs are now seeking an improved work-life balance than their predecessors and will likely see fewer patients a year. The PCP shortage is exacerbated as internal medicine providers seek positions as hospitalists or choose a subspecialty and, therefore, no longer provide outpatient primary care in the community. Few new physicians choose a geriatric primary care subspecialty due to long, expensive training and lower compensation rates than physicians in other specializations. Hospitals and physician practices are augmenting the physician supply with nurse practitioners (NP) and physician assistants (PA) integrated into the care team. The HRSA estimates that the full deployment of NPs and PAs, where supply is increasing, could reduce the physician shortage by over 60%. [69] TMH consistently monitors its provider workforce and utilizes advanced practitioners like NPs and PAs to augment the primary care medical doctor workforce. In

addition, unlike many community-based PCPs, TMH's PCPs accept Medicaid, increasing access to care for some of the most vulnerable residents.

Linkage with a PCP can help reduce the number of Emergency Department visits and lower the rate of hospital stays related to ambulatory-sensitive conditions, potentially preventing the need for hospitalization. Timely PCP intervention can prevent complications or more severe disease.[70] In Providence County, the rate for ambulatory sensitive conditions was 4,820 per 100,000 Medicare beneficiaries compared to the top U.S. performers of 2,765 per 100,000. This rate was also significantly higher than the State of Rhode Island, which also performs poorly on this measure at 4,401 per 100,000.[71] Lifespan's Health Connection, a service to steer patients looking for providers to hospital or community-based providers in their area who are accepting patients, will be a useful tool in connecting the community to PCPs.

In addition to affordability and accessibility, health care access requires health literacy. People need information they can understand and use to make the best decisions for their health. Health literacy helps prevent health issues and helps better manage health problems. TMH already implements strategies to improve health literacy among their communities, such as *Healthwise* workshops and community lectures, and will continue to expand access to new and existing programs.

TMH recognizes the many social determinants of health that often inhibit residents from accessing care available in their communities. In particular, CHF participants noted language access, finances, and housing as barriers to care. Notably, building a well-trained, culturally-competent, and diverse health system workforce to meet Rhode Island's needs is one of the State's twenty-three population health goals.[72] With a diverse resident population in which half (49.5%) of residents speak a language other than English at home[73], TMH has long recognized the need to provide language access supports to patients. TMH currently has eight full-time staff interpreters, three part-time interpreters, and seven per diem staff. In addition to these employees, RIH also utilized contracted vendors to provide interpretation more than 700 times through June of fiscal year ending September 30, 2019. Still, TMH is increasing access through technology and workforce strategies which will be described in its implementation strategy which will follow this report.

Providence County (14.7% of households), and the City of Providence (26.9% of households) have a significant portion of residents who live in poverty.[74] As is well-described in health care and public health literature, poverty gets under the skin, impacting health outcomes over multiple generations. There are also correlations between poverty and overweight/obesity, chronic disease prevalence, and life expectancy.[75]

Housing affordability and homelessness were significant social factors raised by CHF participants as health concerns. As an example, in the city of Providence, 39% of homeowners are cost burdened, meaning they spend more than 30% of income on housing costs. Among renters in Providence, 57% are cost burdened.[76] Being cost burdened increases the likelihood of homelessness and transience and reduces the likelihood that a person will successfully manage their health care.

While TMH cannot resolve poverty and housing insecurity for its patients, it can continually build sensitivity for these issues into the design and delivery of its programs, as well as its workforce training. Additionally, TMH can contribute to policy development and advocacy efforts to reduce inequities between populations.

TMH promotes the "Lifespan Health Connection", a service provided by Lifespan. Patients can call the Health Connection to receive navigation assistance to Lifespan and community providers who are accepting patients. Additionally, LPG, a Lifespan affiliate, opened its first urgent care site in September 2019, with more urgent sites planned to open over the next few years, as an option to increase access to primary care services and reduce the burden of avoidable ED utilization. Interpreter services, which are offered in both a live setting and remotely, will be further enhanced to minimize linguistic barriers to care. Finally, the LCHI will continue delivering many of the skill-building classes and health screening programs on behalf of TMH which have been discussed in Section III of this report.

2. Healthy Weight and Nutrition

Limited access to supermarkets, supercenters, grocery stores, or other sources of healthy and affordable food may make it harder for some Americans to eat a healthy diet. Food insecurity is defined as not having access to safe and nutritionally adequate food.[77] In 2014, Providence County had a slightly higher food insecurity rate (15.1%) than the state as a whole (14.0%).[78] Federal Supplemental Nutrition Assistance Program (SNAP) participation enrollment expanded significantly over recent years - from 80,138 in 2007 to 160,272 October 2018.[79], [80] Many families in Rhode Island have trouble feeding their families consistently, which makes eating healthy foods much more difficult. Benefits of a healthy diet are immense, especially for children, who are still developing. A healthy diet can prevent heart disease, high blood pressure, type II diabetes, and some types of cancer. A healthy diet also helps to lower stress.[81]

Improving access to healthy food is a complex issue that involves state and local political leadership, the people who produce the food - agriculture, farmers and gardeners, and the people who sell the food - distribution and retail sectors, and the community. Fortunately, Rhode Island is making healthy food access a priority. The Rhode Island Food Policy produced an updated Rhode Island Food Assessment in July 2016.[82] Many of the ten Health Equity Zones found that access to healthy foods is a key priority in their communities. The Pawtucket and Central Falls HEZ and the City of Providence HEZ, which are adjacent to TMH, have announced initiatives to increase access to healthful food. These community-based programs are one important avenue of bringing access, by reducing physical barriers to food access and education, and by making the right choices easier.[83]

Although much of healthy food access comes from addressing physical and structural barriers to accessing food such as high cost, lack of transportation or convenience factors, education is also essential. TMH supports patients in maintaining a healthy weight through its many diet, nutrition and weight management programs and services.

Another key component to increasing access to healthy food is to improve the health of food at our institutions – schools, workplaces and hospitals – where many Rhode Islanders spend a great deal of time.[84] The implementation strategies being developed reflect what TMH can do to improve healthy eating for its patients, its staff and its community.

Nutrition and physical activity work to help control risk factors for cardiovascular disease and other comorbidities. Just as TMH has a reputation for providing excellent cardiac health care, it also delivers evidence-based cardiac disease prevention programs. TMH maintains its commitment to promoting cardiac health and providing a range of services and supports for those suffering from heart disease, stroke, and other cardiovascular conditions. TMH is committed to expanding access to programs that promote cardiac health to prevent disease such as screening initiatives, free education and awareness programs, and community activities.

TMH will maintain its existing array of health-related educational programs, health screening services, support groups, and other outreach geared towards healthy weight and nutrition. TMH will expand access to its existing evidence-based Centers for Disease Prevention and Control-recognized Diabetes Prevention Program. TMH will continue to fund community programs while also focusing on delivering its own healthy weight and nutrition interventions to promote community policy initiatives which emphasize healthy behaviors.

3. Cancer

TMH is a founding partner of the Lifespan Center Institute (LCI), which gives patients access to oncology services at three area hospitals and a community clinic, many service delivery options, and available clinical trials. TMH is actively involved in implementing the LCI 3-year action plan, the *Roadmap* and participated in LCI's planning retreat in April 2019. In addition, LCI continues to provide community-based and clinical services to promote cancer prevention, screening, treatment, and survivorship, including free cancer screening programs.

Cancer is the second leading cause of death in Rhode Island and had a higher mortality rate in Rhode Island (158.4 per 100,000) compared to the United States (155.9) in 2016 according to the most recent CDC reports. Cancer incidence was also higher in Rhode Island (450.6 per 100,000) than in the United States (435.6 per 100,000) in 2016.[85] The highest incidence was for female breast cancer (135.4 per 100,000) but the highest mortality was for lung and bronchus cancer (41.6 per 100,000).[86]

In Rhode Island and the U.S. overall, annual counts of colorectal cancer cases and deaths have decreased in the past 25 years, due to improved screening and treatment. Age-adjusted incidence for colorectal cancer in 2016 was 30.9 per 100,000 with nearly 77% of the population screened.[87]

Skin cancer (also known as Melanoma of the skin) is the most common cancer in the United States. Most cases of melanoma, the deadliest kind of skin cancer, are caused by exposure to ultraviolet light. Skin cancer prevention strategies include protecting skin from the sun and avoiding indoor tanning.[88] TMH, through the LCI and LCHI continues to offer free skin cancer screening annually.

In Rhode Island, tobacco use claims 1,800 lives and costs $640 million in health care bills each year.[89] Smoking cessation counseling continues to be a need of the community, and a key strategy to reduce the burden of cancer. Fewer than 5% of smokers who try to quit by themselves are successful, but there are several smoking cessation programs and studies available within Lifespan hospitals to give smokers the support they need.[90] TMH offers smoking cessation research studies and programs to the community. Smoking and smoking cessation lectures were presented at local schools and community events. Cancer lectures were also delivered at community events.

Since 2013, the Lifespan Community Health Institute and TMH, in partnership with the Rhode Island Department of Health offers smoking cessation counseling and treatment services to uninsured and underinsured people who might not otherwise be able to access or afford treatment. TMH's adult outpatient behavioral medicine services also help individuals improve health through behavior change.

Cigarette smoking among Rhode Island high school students has decreased significantly in the past three years, from 8% reporting smoking cigarettes in the past 30 days in 2013 to 5% in 2016. However, many teens that report smoking cigarettes also report trying to quit.[91] Rhode Island high school students reported ever using an electronic vaping product at approximately the same rate (40.3%) as the U.S. average (42.2%) but significantly more Rhode Island youth reported currently using an electronic vaping product (20.1%) compared to the U.S. (13.2%).[92] This has heightened the need for tobacco-free education and advocacy. LCHI provides tobacco prevention programs in local schools upon request, and TMH continues to support an array of school-based programs that convey the "no smoking" message, which has expanded to discourage vaping and e-cigarettes.[93]

Through the LCI, TMH offers a robust cancer program with a range of specialists and programs for prevention, treatment, and survivorship. TMH will continue to strengthen disease site expertise through the recruitment and retention of clinicians, as needed. TMH will continue to offer education, community-building, and celebratory programs focused on cancer topics throughout the year and place increased attention on reaching minority and vulnerable populations. In order to augment support for its existing and new cancer patients, TMH will continue to offer navigator services and grow its peer support services.

4. Education and Outreach

The need for increased outreach and education is identified in the RIDOH *Strategic Framework* with two of the five strategies addressing this in some form[94]:

- Promote healthy living through all stages of life; and
- Analyze and communicate data to improve public's health.

Three of Rhode Island's twenty-three population health goals focused, at least partially, on the need for Outreach and Education[95]:

- Promote behavioral health and wellness among all Rhode Islanders;
- Improve health literacy among Rhode Island residents; and
- Increase patients' and caregiver's engagement within care systems.

CHF participants strongly supported this need with focus on:

- Health literacy;
- Health and wellbeing, prevention; and
- Healthy food choices.

The CHF participants identified the need for a focus on the improvement of health literacy throughout Rhode Island and eliminating that as a barrier to health care. People need information they can understand and use effectively to make the best decisions for their own health and the health of their families. To accomplish this, they need to fully understand how, where and when to access health services. Strong health literacy helps prevent health and manage health concerns resulting in improved outcomes. In helping to target programs, the findings of Rhode Island's Special Legislative Commission to Study the Topic of Health Literacy (November 2017)[96] noted that:

- There is a lack of health literacy among the elderly, individuals with disabilities, and individuals suffering from mental illness;
- Certain populations, including Hispanics (14% of RI population), are impacted more acutely; and
- Improving health literacy at an early age has a direct impact on health literacy in later life.

Since the Commission's report was issued, providers throughout Rhode Island, including at TMH, have been developing programs to address health literacy but the strong opinion among the CHF participants is that more work is needed. Additionally, CHF participants indicated a need to increase the education within the community about programs and services that TMH offers so that the population better understands what is already available and how to access those services.

The United States Preventative Services Taskforce (USPTF) recommends screening for high blood pressure in adults aged 18 years or older,[97] and recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese.[98] "Healthy People 2020" cites improving access to clinical preventative screenings as a key public health priority.[99] The LCHI provides free blood pressure and glucose screening to uninsured and low-income residents in the Lifespan

service areas, with a focus on populations who are at higher risk for diabetes and cardiovascular disease.

An important outreach target for CHF participants was education on healthy food options. Obesity is a significant problem in Rhode Island with 31% of the 2017 adult and child population considered obese or overweight.[100] Reducing obesity in children, teens and adults is one of the RIDOH's population health goals.[101] Obesity causes heart disease, stroke, some cancers, respiratory disease, diabetes and kidney disease and is caused by poor diet and physical inactivity, among other factors. In fact, the CDC reports that physical activity and poor diet are catching up with tobacco use as the second leading preventable cause of death in the US. Rhode Island is making healthy food access a priority through the HEZ, giving TMH the opportunity to coordinate efforts with the State and other community-based providers in outreach programs.

The CHF participants felt that outreach and education should be accomplished through a variety of channels and formats to capture the population where they live, work, pray and play. A strong provider network (Priority #1) can also support this outreach effort. Less traditional means of communication should be developed, particularly to reach the "millennial" population (currently between twenty-three and thirty-eight years of age) who are now in positions as decision-makers about their health and their families. Millennials value speed, consistency, and transparency so information needs to be tailored to capture their attention. Millennials are technology oriented and value receiving information through text, social media, mobile applications, and other online sources.[102]

CHF participants encouraged TMH to use its health care leadership role to develop outreach programs throughout the state to promote strategies to improve personal health and wellbeing with a specific focus on adopting behaviors to prevent health problems from developing later in life. It is widely recognized that easing socioeconomic stressors is critical to improving population health and reducing the incidence of disease. TMH can partner with other community-based providers like the HEZ to create organized outreach and education programs that can be impactful on the population's behaviors.

TMH will continue offering expanded educational and health literacy programs on its own and through partnerships with schools, employers, community-based organizations, and churches. Section III of this report discusses in detail many of these programs already available to the TMH community. Programs will focus on the risk factors and diseases that contribute to the greatest burden of morbidity including overweight/obesity, cardiovascular health, diabetes prevention, and cancer. At the same time, TMH will continue raising awareness of its programs it offers so in an effort to reach a wider range of the community it serves.

5. Mental and Behavioral Health

Based on 2016 data, a larger percentage of Rhode Islanders (15%) report poor or fair health than does the overall US population (12%). A similar comparison is also true for mental health with Rhode Islanders reporting 4.3 poor mental health days in the past 30 days whereas across the United States, 3.1 days were reported. With regard to physical health, Rhode Islanders report 3.8 days of poor physical health in the past 30 days compared to 3.0 days for the general U.S. population Providence County is a main contributor to these high averages in Rhode Island, where 17% of the adults in the County report poor or fair health, 4.4 poor mental health days, and 4.0 poor physical health days.[103]

People with a mental health diagnoses are more likely to use alcohol or drugs than those not affected by a mental illness. In 2017, 18.3% of adults with a mental illness had a substance use disorder in the past year, while those adults with no mental illness only had a 5.1% rate of substance use disorder in the past year. For adolescents, ages twelve-seventeen years, in 2017 the percent who used illicit drugs in the past year was higher among those with a Major Depressive Episode (29.3%) than those without (14.3%).[104] Addressing substance use treatment and prevention cannot be done without considering mental health. Diagnosing and intervening on mental health issues is key to primary prevention of substance use and addiction.[105]

Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. Substance use disorders can include use of tobacco, alcohol or other drugs.[106] Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals (BHDDH) and *Prevent Overdose RI* reported that treatment admissions for heroin were on the rise between 2010-2014, while admissions for alcohol abuse, other prescription drugs and marijuana had declined.[107] Hospitals are crucial to improve early mental health and addiction diagnoses, to increase utilization of the Prescription Monitoring Program (PMP) to prevent addiction, and to provide "Medication-Assisted Treatment" (MAT) and support services to those who survive overdose.

A national study from Stanford University led by Dr. Michael Yokell, formerly a researcher at TMH, identified 135,971 Emergency Department visits that were coded for opioid overdoses in the U.S. in 2010 with a financial cost of $2.3 billion for both inpatient and Emergency Department care.[108] With the rapid increases of overdoses due to fentanyl-laced heroin, these numbers are certain to be significantly higher today. For example, 37% (225) of Rhode Island's overdose cases screened for fentanyl in 2014 tested positive.[109]

The Rhode Island Strategic Plan on Addiction and Overdose reports that although Rhode Island has an electronic PMP and some of the strongest clinical guidelines for the treatment of chronic pain in the country, provider participation is low and is often not enforced. Hospital and state efforts to expand and enforce the use of the PMP, alongside efforts to engage people who are addicted in treatment with evidence-based medical therapies and recovery support could help mitigate the epidemic in Rhode Island.[110]

Sadly, 314 Rhode Islanders died from drug overdoses in 2018.[111] Due to the high mortality in the state and identification of substance use disorder as a top priority by Rhode Island Governor Gina Raimondo, there has been a steady growth of services targeting substance misuse and addiction. Programs are available at a range of sites: community-based programs, inpatient detoxification centers, outpatient services, and residential programs. PCPs are starting to offer MAT and Office Based Addiction Treatment as an integrated program in their offices. Policy changes have resulted in Narcan being available without a prescription and reimbursement is available for Peer Recovery Specialists. Training programs for Peer Recovery Specialists have proliferated. Despite the range of emerging services, the CHF participants still felt that access is difficult and a barrier to care.

Lifespan remains invested in working to address the overdose epidemic in Rhode Island. Leveraging the expertise at TMH and across the Lifespan system should be beneficial in responding to the need in the TMH service area. TMH continues to participate on the Governor's Overdose Prevention and Intervention Task Force which issued a strategic plan in 2016 and updates to the plan in 2019. Additionally, the Substance Use Disorders Treatment Program at TMH provides consultations and direct care for patients with substance use disorders and/or with dual-diagnosed conditions. TMH also provides an outpatient program that combines professional care and self-help approaches with an emphasis on abstinence, family participation, relapse prevention, and health promotion.

As the stigma associated with treatment declines, patient volume is expected to increase. Thoughtful, integrated approaches with a focus on patient-centered, community-based, recovery-oriented programs that coordinates care as an integral component of patients' overall health are being developed. A prime example is the newly established Center of Biomedical Research Excellence (COBRE) on Opioids and Overdose at RIH, the first such COBRE center in the nation. During the period covered by the September 30, 2019 CHNA implementation plan, the COBRE will organize two to three symposia that attract researchers and practitioners leading interventions on opioids and overdose, build a website to disseminate information, and bring on at least three pilot project leaders to test innovative responses to the nationwide opioid epidemic.

Through the promotion of established PediPRN, Kids Link RI, MHFA, and other community-based health services, offered by system affiliate EPBH, TMH will continue improving access to and raising awareness of behavioral health services available to the community it serves. TMH will also continue participating in state initiatives to improve access to behavioral health services and implement strategies to combat the opioid epidemic affecting Rhode Island. Additionally, TMH leverages established programs at EPBH to provide educational programs to youth in its community.

VI. Conclusion

The CHNA is a tool that TMH will use to address the significant health needs identified in this report. The results of the CHNA will guide the development of TMH's community benefit programs and implementation strategy. TMH's leadership team, including its Board of Trustees, members of executive management, and other individuals critical to the organizational planning process are currently conducting TMH's implementation strategy which will detail action item plans to covering the period from October 1, 2019 through September 30, 2022. This implementation strategy will be completed and authorized by the TMH Board of Trustees consistent with IRS rules and regulations.

A. Acknowledgements

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Community Forum Host Sites
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IBG Studios, Providence, Rhode Island
The Jewish Alliance, Providence, Rhode Island
The Miriam Hospital, Providence, Rhode Island
Pawtucket YMCA, Pawtucket, Rhode Island
Progreso Latino, Central Falls, Rhode Island

B. Contact Information

For information regarding the 2019 TMH CHNA process or findings, or for information on any of the services or strategies mentioned, please contact the Lifespan Community Health Institute.

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Appendix A

Rhode Island Patient Demographics: Region, City, & Town, 2016-2018

Region/Town Clusters		Adult & Pediatric Inpatients			Adult & Pediatric Outpatients		
		2016	2017	2018	2016	2017	2018
Urban Core Region	**Providence, RI:**						
	City of Providence, RI	8,096	8,008	7,626	171,740	173,325	170,600
	Providence, RI Subtotal	**8,096**	**8,008**	**7,626**	**171,740**	**173,325**	**170,600**
	Cranston/Warwick Cluster:						
	Cranston, RI	4,852	4,646	4,425	75,085	75,446	73,178
	Warwick, RI	2,441	2,354	2,200	32,439	32,426	32,169
	West Warwick, RI	697	708	664	10,418	10,262	10,608
	Cranston/Warwick Cluster Subtotal	**7,990**	**7,708**	**7,289**	**117,942**	**118,134**	**115,955**
	North Providence Cluster:						
	Central Falls, RI	453	472	538	11,184	11,250	12,271
	Johnston, RI	1,035	1,088	1,043	14,480	14,260	14,401
	North Providence, RI	408	394	396	7,389	7,339	7,336
	Pawtucket, RI	1,523	1,686	1,958	35,473	35,594	40,203
	North Providence Cluster Subtotal	**3,419**	**3,640**	**3,935**	**68,526**	**68,443**	**74,211**
Urban Core Region Subtotal		**19,505**	**19,356**	**18,850**	**358,208**	**359,902**	**360,766**
East Bay Region	**Barrington Cluster:**						
	Barrington, RI	535	539	461	8,709	8,501	8,164
	Bristol, RI	851	844	800	9,118	9,073	8,484
	Warren, RI	641	609	580	5,930	5,821	5,540
	Barrington Cluster Subtotal	**2,027**	**1,992**	**1,841**	**23,757**	**23,395**	**22,188**
	Fall River Cluster:						
	Fall River, MA	629	711	644	4,039	4,169	3,804
	Little Compton, RI	48	41	28	682	665	622
	Somerset, MA	114	136	129	1,711	1,557	1,544
	Swansea, MA	148	136	173	2,154	2,300	2,335
	Tiverton, RI	151	167	206	2,752	2,751	2,849
	Fall River Cluster Subtotal	**1,090**	**1,191**	**1,180**	**11,338**	**11,442**	**11,154**
	New Bedford Cluster:						
	Dartmouth, MA	120	134	143	954	860	907
	New Bedford, MA	507	653	576	2,186	2,369	2,283
	Westport, MA	86	88	80	869	950	889
	New Bedford Cluster Subtotal	**713**	**875**	**799**	**4,009**	**4,179**	**4,079**
	Newport Cluster:						
	Jamestown, RI	85	107	65	1,773	1,860	1,832
	Middletown, RI	231	274	237	4,637	4,578	4,586

	Newport, RI	311	358	325	5,750	6,007	6,064
	Portsmouth, RI	240	220	244	4,582	4,638	4,550
	Newport Cluster Subtotal	**867**	**959**	**871**	**16,742**	**17,083**	**17,032**
East Bay Region Subtotal		**4,697**	**5,017**	**4,691**	**55,846**	**56,099**	**54,453**
I-95 Corridor Region	**Attleboro Cluster:**						
	Attleboro, MA	473	410	534	4,253	4,201	4,523
	North Attleboro, MA	215	191	260	2,314	2,254	2,152
	Plainville, MA	63	39	56	356	345	344
	Wrentham, MA	19	26	18	227	188	194
	Attleboro Cluster Subtotal	**770**	**666**	**868**	**7,150**	**6,988**	**7,213**
	Cumberland Cluster:						
	Cumberland, RI	592	740	701	12,338	12,795	12,871
	Lincoln, RI	407	478	437	8,097	8,484	8,905
	Smithfield, RI	507	484	536	7,750	7,849	7,611
	Cumberland Cluster Subtotal	**1,506**	**1,702**	**1,674**	**28,185**	**29,128**	**29,387**
	East Prov. Cluster:						
	Dighton, MA	41	45	49	630	581	688
	East Providence, RI	2,398	2,318	2,442	29,980	29,403	29,677
	Rehoboth, MA	196	230	252	3,294	3,358	3,254
	Seekonk, MA	366	391	345	5,396	5,331	5,446
	East Prov. Cluster Subtotal	**3,001**	**2,984**	**3,088**	**39,300**	**38,673**	**39,065**
I-95 Corridor Region Subtotal		**5,277**	**5,352**	**5,630**	**74,635**	**74,789**	**75,665**
South Region	**Coventry Cluster:**						
	Coventry, RI	736	764	724	11,034	11,302	11,354
	East Greenwich, RI	384	457	369	6,876	6,769	6,580
	Exeter, RI	82	88	96	1,646	1,549	1,689
	North Kingstown, RI	540	581	572	9,071	9,180	9,127
	West Greenwich, RI	123	128	122	2,029	1,946	2,026
	Coventry Cluster Subtotal	**1,865**	**2,018**	**1,883**	**30,656**	**30,746**	**30,776**
	Southern RI Cluster:						
	Charlestown, RI	138	136	124	1,305	1,252	1,359
	Hopkinton, RI	187	154	172	2,105	2,085	2,029
	Narragansett, RI	180	178	219	2,689	2,617	2,613
	New Shoreham, RI	8	9	19	128	117	143
	Richmond, RI	67	59	88	828	907	832
	South Kingstown, RI	395	442	428	5,709	5,606	5,703
	Westerly, RI	280	301	230	2,604	2,834	2,785
	Southern RI Cluster Subtotal	**1,255**	**1,279**	**1,280**	**15,368**	**15,418**	**15,464**
South Region Subtotal		**3,120**	**3,297**	**3,163**	**46,024**	**46,164**	**46,240**
North West	**NorthWestern MA/RI Cluster:**						
	Burrillville, RI	325	346	343	4,795	4,691	4,999
	Douglas, MA	5	13	13	112	129	157

	Foster, RI	192	138	127	2,317	2,226	2,301
	Glocester, RI	143	172	175	2,800	2,938	2,837
	Scituate, RI	298	323	366	5,232	5,109	5,379
	Uxbridge, MA	10	8	6	228	252	238
	NorthWestern MA/RI Cluster Subtotal	**973**	**1,000**	**1,030**	**15,484**	**15,345**	**15,911**
	Woonsocket Cluster:						
	Bellingham, MA	27	15	30	309	288	268
	Blackstone, MA	45	45	31	529	605	416
	Franklin, MA	29	24	23	251	262	245
	Millville, MA	13	8	7	179	148	159
	North Smithfield, RI	219	251	258	3,786	3,986	4,207
	Woonsocket, RI	860	932	980	12,160	12,548	13,060
	Woonsocket Cluster Subtotal	**1,193**	**1,275**	**1,329**	**17,214**	**17,837**	**18,355**
North West Region Subtotal		**2,166**	**2,275**	**2,359**	**32,698**	**33,182**	**34,266**
Other	**RI Unknowns:**						
	RI Unknown Residents	1	1	1	1	1	2
	RI Unk Res Subtotal	**1**	**1**	**1**	**1**	**1**	**2**
	Other:						
	Other MA & Unknown MA	931	1,044	1,212	7,959	7,972	8,473
	CT & Unknown CT	334	310	263	3,672	3,598	3,269
	Other States/Unknowns	415	393	358	3,889	3,588	3,503
	Other Subtotal	**1,680**	**1,747**	**1,833**	**15,520**	**15,158**	**15,245**
Other Subtotal		**1,681**	**1,748**	**1,834**	**15,521**	**15,159**	**15,247**

Subtotal RI Towns	**31,660**	**31,995**	**31,325**	**537,421**	**539,990**	**541,546**
Subtotal 19 MA Towns	**3,106**	**3,303**	**3,369**	**29,991**	**30,147**	**29,846**
SUBTOTAL RI & 19 MA TOWNS	**34,766**	**35,298**	**34,694**	**567,412**	**570,137**	**571,392**
GRAND TOTAL	**36,446**	**37,045**	**36,527**	**582,932**	**585,295**	**586,637**

Appendix B

The Miriam Hospital Community Health Forum Schedule

Tuesday, April 30, 2019
6:00 – 8:00 PM
IBG Studios
199 Camp Street, Providence, RI 02906

Monday, May 20, 2019
6:00 – 8:00 PM
Progreso Latino
626 Broad Street, Central Falls, RI 02863

Tuesday, May 21, 2019
6:00 – 8:00 PM
Pawtucket YMCA
20 Summer Street, Pawtucket, RI 02860

Wednesday, May 29, 2019
5:30 – 7:30 PM
The Jewish Alliance
401 Elmgrove Avenue, Providence, RI 02906

Wednesday, June 5, 2019
6:00 – 8:00 PM
East Side Apartments
83 Doyle Avenue, Providence, RI 02906

Friday, June 21, 2019
12:00 – 1:00 PM
Hurvitz Conference Room
The Miriam Hospital
164 Summit Avenue, Providence, RI 029046

Appendix C

The Miriam Hospital CHNA Community Liaison Profiles

Helen Baskerville-Dukes is a native of Rhode Island. She is the founder and owner of *Inspired By Grace Productions*. Since 2005, her company has developed new and original content that is faith and family centered, from script writing to production for plays, movies, web shows, and comedy sketches. In 2018, she started her own local talk show discussing topics that are true-life situations that empower and showcase the positive impact of Rhode Island's diverse cultures and backgrounds. Ms. Baskerville-Dukes has been an active community advocate for many years; especially in the areas of education and equality; leading to her serving as a Providence Democratic Ward Committee member in Ward 3.

Shannan Hudgins, M.A., M.Div., graduated from Andover Newton Theological School in May of 2018 following an administrative career in public service in New Hampshire. A mother of two young adults, she left NH to work as a seminary intern at the Rhode Island State Council of Churches. Now Minister for Special Projects at the RISCC, she has served as the education coordinator for the Helen Hudson Foundation in its work to address the underlying issues of homelessness in RI. Ms. Hudgins is currently coordinating the Council's study series on white privilege, *Merciful Conversations on Race,* and is also a representative of the RISCC in Rhode Island's advance care planning initiatives with local stakeholders and the national organization, C-TAC (Coalition to Transform Advanced Care). She is a member of the C-TAC Interfaith and Diversity Steering Committee and its workgroup. Ms. Hudgins is pursuing ordination with a UCC congregation in Massachusetts.

Luisa Santana recently graduated with a B.S. in Public Health and is passionate about improving the community around her by educating and volunteering. She is an advocate for better community health by highlighting personal choices that can make a positive impact on daily life, such as nicotine education, nutrition and mental health advocacy. Ms. Santana finds inspiration to volunteer and serve her community based on her guiding principle of "uplifting each other, we can make a better environment for all." She currently works as a care coordinator for disabled and elderly patients in Providence and the surrounding cities. Ms. Santana knows the importance of having the community's voice heard and input applied to improve current systems; that is why she hopes to be an asset in this community assessment.

Appendix C (cont.)

Rhode Island Hospital CHNA Community Liaison Position Description

Lifespan Community Health Institute

Community Health Needs Assessment – Community Liaison

Position Description

Position Summary

While excellent care is our top priority, Lifespan also recognizes that health and well-being is more than the absence of disease. We promote a culture of well-being, in part achieved by extending our expertise and services into communities where people live, learn, work, play and pray. Put simply, we embrace our mission of *Delivering health with care*.

A demonstration of Lifespan's mission, the Lifespan Community Health Institute (LCHI) works to ensure that all people have the opportunities to achieve their optimal state of health through healthy behaviors, healthy relationships, and healthy environments. The LCHI, often in collaboration with Lifespan affiliates and/or community partners, addresses a spectrum of conditions that affect health. One of our major initiatives in 2019 is to assist each of the Lifespan hospitals- Rhode Island Hospital/Hasbro Children's Hospital, The Miriam Hospital, Emma Pendleton Bradley Hospital, and Newport Hospital, in performing a Community Health Needs Assessment and developing strategies to respond to the identified needs over the next several years.

The LCHI is recruiting 20-30 individuals who will serve as Community Liaisons, helping to infuse community input in the community health needs assessment process. The Community Liaison is a temporary, part-time position through June 2019. An estimated 30-50 hours will be distributed over the course of 3-4 months. The Community Liaison reports to the Director of the Community Health Institute at Lifespan. This position is not open to current Lifespan employees and does not confer benefits. Community Liaisons will be hired as consultants and paid upon completion of the project.

Responsibilities

The Community Liaison will assist Lifespan staff with planning and execution of at least two community forums as part of the community health needs assessment process for Rhode Island Hospital/Hasbro Children's Hospital, The Miriam Hospital, Bradley Hospital, and/or Newport Hospital. The goal of each forum is to identify and prioritize local community health needs. The Community Liaison will be responsible for identifying local organizations/institutions (e.g. neighborhood associations, non-profits, churches, etc.) that will be willing to host a community forum. Further, the Community Liaison will assist with

recruitment, logistics, facilitation, and interpretation of each forum. The Community Liaison will be trained on expected tasks and relevant data. Primary responsibilities include:

- Team with Lifespan staff and other Community Liaisons to complete tasks.
- Perform community outreach and recruit strategic partners to participate in the needs assessment process.
- Develop and maintain productive relationships with stakeholders, to create buy-in for the community health needs assessment process.
- Assist with the planning and execution of presentations for small groups and community organizations, including logistics and follow-up.
- Coordinate and support other outreach activities, including presentations or tabling at large public events, listening sessions or neighborhood meetings.
- Practice effective communication and reliable follow-up with Lifespan contacts and community partners.
- Track and communicate detailed information regarding supplies or other supports needed to complete tasks.
- Attend all required orientation and check-in meetings.

Qualifications and Competencies

The selected Community Liaison must demonstrate the following qualifications and competencies:

- Trusted community broker with demonstrated success organizing community efforts
- Commitment to and interest in community health
- Willingness to work in a team environment, as well as the ability to complete tasks independently
- Thorough, timely and reliable communication skills
- Excellent oral communication as well as active listening skills
- Comfort communicating by email as well as in person
- Experience and confidence with public speaking
- Effective meeting facilitation
- Strong interpersonal skills and experience working with diverse audiences
- Ability to organize and lead groups
- Willingness to share and leverage personal and professional networks
- Detail-oriented, with excellent time-management skills
- Access to reliable transportation
- Ability to work evening or weekend hours
- Working knowledge of Microsoft Office software, especially Word and PowerPoint

Desired Skills

The following skills are preferred, but not required:

- Personal or professional experience in a public health or related field (e.g. community outreach or organizing, health care, public policy, community development)
- Experience interpreting and explaining data
- Bilingual/Bicultural in Spanish or other languages spoken in Rhode Island

Appendix D

The Miriam Hospital CHNA Sample Community Health Forum Agenda

THE MIRIAM HOSPITAL - 2019 COMMUNITY HEALTH NEEDS ASSESSMENT

Community Forum

Wednesday, May 29, 2019

Hosted by The Jewish Alliance

- **6:00 PM Eat & Visit Information Table**
- **6:30 PM Introductions**
- **6:40 PM Overview of CHNA and progress since 2016**
- **6:50 PM Current Health Data**
- **7:00 PM Question #1: Does this reflect your health concerns? What's missing?**
- **7:20 PM Question #2: How would you prioritize among these health concerns?**
- **7:40 PM Question #3: What would you like for the hospital to do to help address these priorities?**
- **7:55 PM Wrap-Up & Evaluation**

- **Notes:**

Appendix E
The Miriam Hospital CHNA Community Input Form

Lifespan
Delivering health with care.

2019 **Community Health Needs Assessment - Community Input Form**

Lifespan seeks to understand your health concerns and how our hospitals can help respond to those concerns. The information you share will help us to complete a Community Health Needs Assessment and create an action plan. We value your input!

1. To which hospital service area should these comments be attributed?

☐ Emma Pendleton Bradley Hospital
☐ Newport Hospital
☐ Rhode Island Hospital / Hasbro Children's Hospital
☐ The Miriam Hospital

2. Please describe your significant health concerns.

3. What would you like the hospital to do in response to your concerns?

4. Please comment on the progress made in addressing the 2016 priorities (details on reverse).

5. Any additional comments or suggestions?

6. Please share your contact information if you would like to provide additional information.

Name: _____

Email: _____ Telephone: _____

Please visit Lifespan's Learning from our Community page (lifespan.org/our-community) to learn more about the 2019 Community Health Needs Assessments. Thank you for your input!

2016 Community Health Needs Assessment

The Patient Protection and Affordable Care Act (PPACA) requires non-profit hospitals to conduct a Community Health Needs Assessment (CHNA) every three years. CHNAs solicit feedback from members of the community to determine the most pressing health needs in the community the hospital serves. CHNAs aim to address barriers to care, the need to prevent illness, and the social, behavioral and environmental factors that influence health in the community. Based on the needs identified, each hospital develops implementation strategies that respond to the prioritized needs. In 2016, Lifespan completed its second CHNA for each of its hospitals.

The 2016 CHNA process for each hospital identified the following significant needs:

The Miriam Hospital
1. Access to Care and Health Literacy
2. Cardiac Health
3. Cancer
4. Healthy Food Access
5. Substance Use Disorders

Newport Hospital
1. Access to Care and Health Literacy
2. Mental and Behavioral Health
3. Substance Use Disorders
4. Cancer
5. Healthier Weight

Rhode Island Hospital
1. Access to Care and Health Literacy
2. Healthy Weight and Nutrition
3. Substance Use Disorders
4. Cardiac Health
5. Cancer

Bradley Hospital
1. Access to Services
2. Emergency Department Evaluation
3. Transition services for children who age out of pediatric care

For each hospital, and for each need, an implementation plan is included in the CHNA report. That implementation plan describes the action steps that each hospital will take to mitigate the stated need over the 2017 to 2020 fiscal years. Please refer to the reports for detailed implementation strategies.

For more information regarding the CHNA process or findings, please contact Carrie Bridges Feliz, Director of the Lifespan Community Health Institute, at cbridgesfeliz@lifespan.org or 401-444-8009.

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