

Community Health Needs Assessment

THE MIRIAM HOSPITAL

SEPTEMBER 30, 2022

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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. As a complement to its role in service and education, TMH actively supports research. TMH is accredited by the Joint Commission 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 RIH and TMH, Lifespan's affiliated organizations also include Emma Pendleton Bradley Hospital (EPBH), Newport Hospital (NH), Gateway Healthcare, Inc. (Gateway), Lifespan Physician Group, Inc. (LPG), and Coastal Medical Physicians, Inc. (CMPI), as well as other organizations in support of Lifespan and its hospitals.

The Patient Protection and Affordable Care Act (ACA), enacted March 23, 2010, added new requirements codified under Internal Revenue Code (IRC) 501(r) for organizations that operate one or more hospital facilities described in IRC Section 501(c)(3).¹ Included in these new regulations is a requirement for hospital facilities 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.² CHNAs must utilize qualitative and quantitative data and feedback from key stakeholders and community members to determine significant health needs of the community the 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.”³

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.⁴ 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. Subsequent CHNA's have been conducted every three years with implementation progress report triennially.

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.⁵

Lifespan conducted its third CHNA on behalf of TMH in September 2019, including a review of how TMH addressed significant needs identified in its implementation strategy for the three-year fiscal period from October 1, 2016 through September 30, 2019.⁶

This report represents the fourth CHNA conducted by TMH, covering the fiscal period from October 1, 2019 through September 30, 2022. The goals of this CHNA are to: (1) enhance the hospital's perspective on the healthcare needs of its community; (2) establish a baseline upon which future work can build; (3) monitor progress toward health improvement goals; (4) provide a resource for individuals and organizations interested in the health status of the community served by TMH; (5) inform creative discussions and collaborations to improve the health status of RI residents; and (6) meet the requirements of the ACA, which calls for non-profit hospitals to periodically assess the health needs of people living in their service area every three years. 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 fiscal years covering the period of October 1, 2022 through September 30, 2025.

B. History and Mission of The Miriam Hospital

As a founding member of the Lifespan health system, TMH is committed to the Lifespan mission: *Delivering health with care*. Planning 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”.⁷

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 1,300 affiliated physicians and in total, TMH employs more than 3,200 people.⁸

In 2017, Lifespan launched 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 tell Lifespan who we are when we are at our best. This acronym serves as NH's “true-north” guide, helping Lifespan become the best place to obtain care and the best place to work.

In 2021, the Lifespan board of directors approved the Lifespan 2025: CREATE, a strategic plan to guide Lifespan's priorities through 2025. Lifespan 2025 focuses on strategic priorities for a high-quality, high-value academic health system:

- **Care Transformation and Quality**
Advance patient-centric care that prioritizes quality and innovation
- **Research and Education**
Advance excellence and achieve distinction in research and education
- **Engagement and Culture**
Achieve an inclusive culture of workplace excellence for physicians and staff
- **Access, Growth and Population Health**
Improve access, advance population health and achieve strategic growth

- **Teamwork and Patient Experience**
Work together to consistently deliver an exceptional patient and family experience
- **Excellence in Operations and Financial Health**
Achieve excellence in operations with resulting financial health

Further, two pillars support all of the Lifespan 2025 priorities and initiatives:

- **Diversity, Equity, and Inclusion**
- **Innovative and Accountable Management Culture**

Also in 2021, Lifespan engaged stakeholders from across the system to co-create an organizational competency model. Competencies are the skills and behaviors that we need to demonstrate to be successful in our roles and to bring Lifespan's 2025 goals to life. This model includes four core competencies for all Lifespan employees, plus four additional leadership competencies for all Lifespan leaders. The competencies describe how we work together and how we get things done, and they work in concert with our CARE values.

C. 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 Center⁹ and the State's only Women's Cardiac Center.

Table 1- The Miriam Hospital Statistics, FY 2021¹⁰

Year founded	1926
Employees	3,230
Affiliated physicians	1,313
Licensed beds	247
Patient Care	
Patient discharges	17,449
Emergency department visits	66,807
Outpatient visits	204,598
Outpatient surgeries	6,699
Inpatient surgeries	4,494
Financials <i>(\$ in thousands)</i>	
Net patient service revenue	\$469,481
Research funding revenue	\$38,223
Total assets	\$711,731

During the fiscal year ended September 30, 2021, TMH provided more than \$50 million in charity care and other community benefits for its patients, which accounted for 9.3% 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 would reimburse TMH for billed care (including both the amount that would be reimbursed by Medicare, 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 beneficiary.¹¹ As part of its community benefit expenses, TMH provided more than \$5.3 million in financial assistance at cost to patients (charity care), and almost \$11 million in medical and health professions education.¹²

TMH provides many other services to the community for which charges are not generated, including certain emergency services, community health screenings for cardiac health, diabetes and other diseases, immunization and nutrition programs, diabetes education, community health training programs, patient advocacy, foreign language interpretation and 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.

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.¹⁴ In partnership with community-based agencies, LCHI led the design and development of the 2022 CHNA.

Table 2- Net Cost of Charity Care and Other Community Benefits, FY 2021¹³	(\$ in thousands)
Charity care	\$5,329
Medical education, net	\$10,928
Research	\$3,697
Subsidized health services	\$10,924
Community health improvement services and community benefit operations	\$418
Unreimbursed Medicaid costs	\$18,880
Total cost of charity care and other community benefits	\$50,176

Community and patient engagement are critical components of quality improvement and strategic planning for Lifespan Corporation and its affiliated hospitals. Lifespan launched a website: <https://www.lifespan.org/centers-services/lifespan-community-health-institute/reports-and-resources> in the spring of 2016 to describe and publicize the CHNA 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.

D. The Miriam Hospital – Notable Achievements

TMH once again earned recognition as the top hospital in Rhode Island and in the Providence metro area by U.S. News & World Report in 2020, 2021, and 2022 (8th time in a row). In addition, for the second year in a row, TMH’s adult urology program was ranked among the top 50 in the nation in 2020. Eight additional programs and specialties at TMH received a national “high performing” designation for their care and treatment in 2020, twelve in 2021, and nine in 2022 including hip and knee replacements, COPD, colon cancer surgery, heart attack, heart failure, stroke, kidney failure, and diabetes.

In 2019 and 2021, TMH was named a Top Hospital by The Leapfrog Group, a national watchdog organization focused on health care safety and quality. In 2021, TMH was one of 149 hospitals across the country to earn this recognition and one of 72 to also be named a “Top Teaching Hospital.”. TMH also received an “A” in the Leapfrog Hospital Safety Grade ratings both years, based on achievements in protecting patients from harm and error.

In February 2020, TMH was also included in Healthgrades’ list of the 250 best hospitals in the United States with ratings based on the hospital’s performance on 32 conditions and procedures, as well as other factors.

TMH earned Magnet recognition for nursing excellence in March 2020, joining just three other U.S. hospitals in receiving the four-year designation six consecutive times. The Magnet designation from the American Nurses Credentialing Center recognizes excellence in nursing and is considered the gold standard for nursing care, providing consumers with the ultimate benchmark for measuring quality of care.

Beginning in 2020, The Center for Bariatric Surgery at TMH began offering an option for patients with a body mass index greater than 50 or those with BMI greater than 35 along with significant related comorbidities. Biliopancreatic diversion with duodenal switch (BPD/DS) surgery helps patients lose 70-98% of their excess weight and close to 100% of patients with Type 2 diabetes see their disease resolve.

The following year, in 2021, the Center for Bariatric Surgery again earned accreditation from the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program, this time earning its first accreditation in obesity medicine.

The Center for AIDS Research (CFAR), under the leadership of Susan Cu-Uvin, MD was awarded \$1.28 million from the National Institute of Allergy and Infectious Diseases to continue important AIDS research.

Nikhil Panda, MD, a clinical cardiac electrophysiologist with the Lifespan Cardiovascular Institute (CVI), implanted the first leadless pacemaker in Rhode Island. Unlike conventional pacemakers, the Micra pacemaker is placed directly inside the heart, eliminating the need for leads or wires. It treats patients with AV block, a condition in which the electrical signals between chambers of the heart (the atria and the ventricle) are impaired.

Surgeons Dragan Golijanin, MD, Sammy Elsamra, MD, with assistance from vascular surgeon Robert Patterson, MD, at TMH's Minimally Invasive Urology Institute used Lifespan's new da Vinci Xi robot to complete the first robot-assisted inferior vena cava thrombectomy with robot-assisted radical nephrectomy and intraoperative ultrasound in southeastern New England. In 2021, the Minimally Invasive Urology Institute also began performing percutaneous nephrolithotomy procedures. This procedure is a minimally invasive alternative to traditional treatments for large kidney stones and has been shown to that reduce complications.

TMH received a 2020 and 2021 Gold Plus national recognition from the American Heart Association/American Stroke Association for adhering to the high standards of the Get With The Guidelines program. Receiving the Get With The Guidelines Gold Plus Quality Achievement Award means that for two consecutive calendar years, TMH reached an aggressive goal of treating patients with 85 percent or higher compliance to core standard levels of care outlined by the AHA. TMH also met seven out of ten stroke quality measures during the 12-month period. The measures include evaluation of the proper use of medications and other stroke treatments aligned with the most current, evidence-based guidelines, with the aim of speeding recovery and reducing the incidence of death and disability among patients.

Athena Poppas, MD, FACC, Chief of Cardiology and director of the CVI, became president of the American College of Cardiology in March 2020.

Notably, the Total Joint Center at TMH marked its tenth year as the area's highest volume center for total hip, total knee, and total shoulder replacement procedures. 2021 saw another milestone for the Total Joint Center in performing its 15,000th total joint replacement. This was one of the specialty areas to earn a rating of high performance by U.S. News & World Report. The Total Joint Center is also the only Rhode Island provider to offer the less invasive bikini anterior hip replacement method.

TMH received a \$11.1 million National Institutes of Health grant to establish Rhode Island's first Center of Biomedical Research Excellence. This center will focus on research to understand the role of stress and trauma during childhood and how these experiences influence health and wellness across the lifespan.

The CVI valve and structural heart program performed its 1000th Transcatheter Aortic Valve Replacement, a lifesaving procedure for patients suffering from severe aortic valve stenosis. CVI was the first program in Rhode Island and among the first in New England to provide this less-invasive alternative to open heart surgery.

Herbert Aronow, MD, MPH, FSVM, Director of Interventional Cardiology at the CVI and director of the cardiac catheterization laboratories at RIH and TMH, was elected president of the Society for Vascular Medicine for the 2021-2023 term.

After signing a letter of intent in February 2020, CMPI and Lifespan finalized a partnership agreement in April 2021. With a team of over 125 providers located in 20 medical offices across Rhode Island, CMPI is a leader in coordinated primary care and serves 120,000 patients. Combining Lifespan's vast specialty care capabilities with CMPI's primary care expertise will benefit patients across the state, offering enhanced value through a continuum of coordinated, high-quality patient care. This partnership plays a key role in Lifespan's efforts to elevate its population health strategy, also a major facet of the Lifespan 2025 Initiative—CMPI has achieved great success with population health management and is now seen as a national model. In September 2021, CMPI President G. Alan Kurose, MD, was appointed senior vice president of primary care and population health for Lifespan. As one of the founders of CMPI in 1995, Dr. Kurose has been a driving force in positioning them at the forefront of healthcare delivery system transformation, both locally and nationally.

II. The Miriam Hospital – Defining the Community It Serves

TMH is located in Providence County, home of over 658,000 residents covering 409 square miles, and 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 the State. It is the most densely populated county in Rhode Island. The population of Providence County is racially and ethnically diverse, and is slightly younger, on average, than the rest of Rhode Island.¹⁶

Table 3- Demographics estimates, July 1, 2021¹⁷	Providence City	Providence County	Rhode Island
Population estimates	189,692	658,221	1,095,610
% below 18 years of age	21.3%	20.3%	19.1%
% 65 and older	11.6%	16.0%	18.1%
% Non-Hispanic African American	16.1%	13.0%	8.8%
% American Indian and Alaskan Native	0.7%	1.5%	1.2%
% Asian	5.6%	4.5%	3.7%
% Native Hawaiian/Other Pacific Islander	0.2%	0.3%	0.2%
% Hispanic/Latino	43.5%	25.0%	17.1%
% Non-Hispanic white	33.8%	59.0%	70.4%
% Language other than English spoken at home*	49.9%	31.6%	22.4%
% Females	52.1%	50.9%	51.0%
Median household income*	\$49,065	\$62,323	\$70,305
% Persons in poverty	23.0%	12.4%	10.6%
Persons per square mile**	10,373.5	1,613.6	1,061.4
% Persons without health insurance	8.0%	5.4%	4.6%

*2016-2020 estimates, **2020

The median household income within Providence County is \$62,323 and 12.4% of residents are living in poverty. Nineteen percent of residents are foreign born, and 31.6% of families speak a language other than English at home. Slightly more than 86% of Providence County residents are high school graduates, and nearly 65% of people are active in the workforce. According to the U.S. Census, 5.4% of residents are uninsured.¹⁸

The demographics of the city of Providence, where 14.5% FY '21 TMH patients lived¹⁹, differ from the County with almost twice as many city residents living in poverty. The city population is also made up of a higher proportion of African American (16.1% vs. 13.0%), Asian (5.6% vs. 4.5%), and Hispanic (43.5% vs. 25.0%) residents when compared to Providence County. The median household income in the city (\$49,065) is significantly lower than the county and state median. As of 2021 estimates, there are almost 50% more residents who are uninsured in the city of Providence when compared to Providence County, and nearly twice as many uninsured than the statewide percentage.²⁰

The Miriam Hospital Patient Population

TMH's outpatient population is largely from Rhode Island; 86.2% of its outpatient encounters in the fiscal year ended September 30, 2021 reflect treatment of Rhode Island residents. Another 11.9% of the hospital's outpatient encounters involve patients from Massachusetts, a proportion that has grown in recent years. Still, the portion of TMH's outpatient population that came from Rhode Island's urban core barely changed in the past three years (45.7% vs. 45.8% in FY '18). The cities of residence with the largest TMH outpatient volume are Providence (14.4%), followed by Pawtucket (8.4%), Cranston (7.8%), and Warwick (6.6%).²¹

18.4% of TMH's outpatients reside along the Interstate 95 corridor, reflecting towns in Rhode Island and Massachusetts, with 6.0% residing in Seekonk, Massachusetts, 3.7% hailing from Cumberland, Rhode Island, and 2.9% from Lincoln, RI.²²

13.7% of TMH's outpatients reside in Rhode Island's East Bay communities, such as Bristol (3.1%), Barrington (2.0%), and Warren (1.9%), and approximately twelve other cities and towns from the East Bay, Aquidneck Island and nearby southeastern Massachusetts.²³

Another 9.3% of TMH's outpatients reside in southern Rhode Island, with the largest concentration coming from Coventry (2.0%), North Kingstown (1.7%), and East Greenwich (1.6%). Of note, the share of TMH outpatients from the northwest region of the state stayed relatively steady from the fiscal year ended September 30, 2018 (11.8%) to the fiscal year ended September 30, 2021 (11.1%), with the largest share (4.5%) residing in Woonsocket.²⁴

The portion of TMH's inpatient admissions in FY '21 who resided in Rhode Island is similar to its outpatient encounters, with 84.2% of inpatients coming from Rhode Island and 14.4% residing in Massachusetts. More than half of the Rhode Islanders (55.7%) come from the urban core, with 17.9% of all inpatients residing in Pawtucket; 17.4% residing in Providence; and 11.1% living in Cranston, Warwick, and West Warwick. Another 25.1% of inpatients lived in towns along the Interstate 95 corridor, 6.2% living in the northwest region, and 4.2% in the southern region of the state.²⁵

In the fiscal year ended September 30, 2021, 86.6% of TMH patients spoke English as their primary language. The next most frequently spoken languages were Spanish (5.9%), Portuguese (1.2%), Cape Verdean Creole, (0.5%) and Russian (0.1%). Of note, 5.5% were categorized as speaking an "Other" language.²⁶

Over three quarters (76.4%) of the TMH patient population self-identified as not Hispanic or Latino and 12.2% as Hispanic or Latino. Of those who identified as not Hispanic or Latino, 66.0% considered themselves White or Caucasian, 6.5% identified as Black or African American, and 1.0% identified as Asian. Table 4 shows the racial breakdown of all ethnicities of the patient population in fiscal year ended September 30, 2021.²⁷

Table 4- The Miriam Hospital Patient Race, 2021²⁸	Inpatient Percent	Outpatient Percent
Not Hispanic or Latino	88.7%	84.2%
White or Caucasian	78.0%	72.8%
Black or African American	7.9%	7.5%
Asian	0.5%	1.2%
American Indian or Alaska Native	0.1%	0.1%
Native Hawaiian or Other Pacific Islander	0.1%	0.1%
Hispanic or Latino	10.6%	12.3%
Other/Unknown/Patient Refused	9.1%	12.0%

III. Update on 2019 CHNA Implementation Strategy

TMH conducted a CHNA dated September 30, 2019, that resulted in an implementation plan for the period of October 1, 2019 through September 30, 2022. The community health needs assessment 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 inform its selection of implementation priorities.²⁹

The 2019 Community Health Needs Assessments report and the Implementation Strategy covering the period between October 1, 2019 through September 30, 2022 were distributed widely among Lifespan stakeholders, community partners, and the public. Provided below is an update on progress made in addressing each of these significant needs that were identified in the September 30, 2019 TMH CHNA.

It should be noted that this implementation period coincided with the identification and rapid spread of COVID-19 which impacted every facet of life in the United States, as well as every facet of hospital operations including staffing- hiring and retention, financing, infection control, community trust, and more. As described below, TMH’s management and experience of the COVID-19 pandemic required that some planned implementation activities needed to be modified, canceled or postponed.

Access to Care

Below are actions that TMH took between October 1, 2019 and September 30, 2022 to address the identified significant health need of access to care:

1.1 In partnership with JUMP Bike Share, TMH will launch a “Prescribe aBike” Program in June 2020 for 800 community members annually who will have free access to bikes for one of the following health needs or social determinant of health obstacles: Access to transportation; Hypertension; Diabetes; History of Cardiac Disease; or Obesity.

- The bike share program in the City of Providence was paused by the City in the summer of 2019, resumed in February 2020, and then canceled by the City soon thereafter. As a result, even though Lifespan had sponsored the citywide program, TMH was unable to launch the “Prescribe a Bike” program as planned. Lifespan did donate bike helmets purchased for the program to local youth in 2021 and 2022.

1.2 Lifespan affiliates’ partnership with the Nonviolence Institute (NVI) will continue to serve the TMH community’s access to health by provide nine street level workers in the Providence area who will work to mitigate the risk and incidence of physical violence, resulting in injury or death in the community; connecting directly with patients at TMH who have been victims of violence and providing them with access to victim compensation assistance and social workers; and assisting hospital staff in the patient contact and assessment of victim/trauma related incidents.

- Lifespan provided \$98,750 in FY 2021 and \$93,750 through June of FY 2022 to support the operations of the NVI, including staffing the NVI’s street worker and victim assistance programs.
- In addition, two Lifespan leaders have served on the Board of Directors of the NVI during this reporting period, providing human resources and other needed expertise to this local non-profit organization.

1.3 Open an East Greenwich, Rhode Island Cardiac Rehabilitation (CR) satellite location to eliminate the wait list at RIH Collyer Street location in Providence and improve access to care.

- The East Greenwich CR site opened in November 2019 and successfully reduced the weight time for CR services. However, the East Greenwich CR site, like Providence, is currently at full patient volume. The increase patient volume has resulted in a modest average 2-week wait time for new appointments. Of note, the COVID-19 pandemic resulted in the Newport, Rhode Island CR location closing in June 2021 and a six-to-seven-week furlough at the other locations.

1.4 In 2020, TMH, in coordination with Lifespan affiliates, will implement “Ride Roundtrip”, an initiative to improve patient access to healthcare, improve internal patient navigation that will ultimately provide a better patient experience, and ultimately lead to better health outcomes.

- RoundTrip launched March 2020. This ride service program leverages digital technology to decrease missed patient appointments, thereby increasing access for all patients. The program is expected to significantly reduce patient burdens or difficulties in obtaining rides for medical appointments.
 - FY ‘20: 6,450 trips
 - FY ‘21: 10,396 trips
 - FY ‘22 (through 8/8/22): 7,153 trips
 - FY ‘20-22 Total (through 8/8/22): 23,999 trips

1.5 In coordination with the hospital affiliates, Lifespan Physician Group, Inc. (LPG) will actively recruit primary care physicians, medical specialists, and advanced practice providers to fill vacancies and match community needs.

- As a strategy to improve patients’ access to care, LPG hired a total of 360 physicians, psychologists, advanced practice providers, and medical specialists in FY ‘19, FY ‘20 and through 7/13/22 of FY ‘22. Of these, the largest number of new hires were in the fields of behavioral health (32 psychologists, 25 physicians, and 3 advanced practice providers), followed by hospitalists (55 physicians) and adult primary care providers (17 physicians and 19 advanced practice providers). Additional areas of successful recruitment include anesthesia, urgent care, pediatric primary care, obstetrics/gynecology, and other specialties.

1.6 In coordination with LPG, explore new models of care delivery with a focus on primary care and lowering cost.

- After signing a letter of intent in February 2020, CMPI and Lifespan finalized a partnership agreement in April 2021. With a team of over 125 providers located in 20 medical offices across Rhode Island, CMPI is a leader in coordinated primary care and serves 120,000 patients. Combining Lifespan’s vast specialty care capabilities with CMPI’s primary care expertise will benefit patients across the state, offering enhanced value through a continuum of coordinated, high-quality patient care. This partnership plays a key role in Lifespan’s efforts to elevate its population health strategy, also a major facet of the Lifespan 2025 Initiative—CMPI has achieved great success with population health management and is now seen as a national model. In September 2021, CMPI President G. Alan Kurose, MD, was appointed senior vice president of primary care and population health for Lifespan. As one of the founders

of CMPI Medical in 1995, Dr. Kurose has been a driving force in positioning them at the forefront of healthcare delivery system transformation, both locally and nationally.

1.7 LPG intends to open six Urgent Care locations within Rhode Island and Southeastern Massachusetts during fiscal years 2020-2021.

- LPG opened an urgent care clinic in Warwick in at the beginning of FY '20, in Middletown in November 2019, and in Providence in January 2021. The need to focus resources on pandemic response meant that LPG was unable to open all six planned urgent care locations during FY '20-22 and will instead continue that work in FY '23 and beyond.

1.8 Under management of LPG, expand access to specialty care, including neurosurgery, rheumatology, cardiology, gastroenterology, and ophthalmology. In addition, both spine and pain management services are expected to grow during the next three years.

- In FY '20, FY '21, and through 7/13/22, LPG hired physicians and advanced practice providers in neurosurgery (10), rheumatology (3), cardiology (23) gastroenterology (2), ophthalmology (1), and spine & pain management services (5).

1.9 LPG will continue to lead the integration of behavioral health services into primary care practices.

- LPG hired 60 behavioral health providers – physicians, psychologists, and advanced practice providers – in FY '20, FY '21 and through 7/13/22 in FY '22, more than any other specialty. This hiring, amid the pandemic and an extremely competitive market for behavioral health providers, reflects Lifespan's commitment to improve access to behavioral health care. Many of these new hires are collocated in primary care practices to facilitate referrals and patient access to behavioral health care.

1.10 Implementation and expansion of technology in interpreter services, including “Interpreter on Wheels.” Where appropriate, interpreter services will be made available using laptops and other electronic devices.

- To improve access to interpreter services and reduce barriers to care, TMH utilizes staff interpreters, video remote interpreting (VRI), over-the-phone interpreting (OPI), and contracted interpreters. In FY ‘22, TMH has 18 VRI devices (interpreters on wheels). Incidents of VRI and OPI interpreting totaled 21,735 in FY ‘20 (Jan 2020 through September 2020), 41,556 in FY ‘21, and 37,246 in FY ‘22 thru 7/31/22. Also in FY ‘22, TMH employs 14 full time equivalents of staff interpreters who provided 13,405 interpretation encounters through 7/31/22. Further still, in its pursuit to eliminate language barriers to care, TMH documented a few hundred local interpretation vendor encounters in FY ‘20-22.

1.11 In coordination with the Lifespan accountable care organization (ACO), work collaboratively to transform healthcare delivery through contracting relationships which reward our collective efforts to deliver highly efficient care at the highest level of quality to the satisfaction of not only the patients but also the providers. Part of that effort includes the assignment of care managers to our most complex patients to manage chronic medical conditions, as well as address many social determinants that may impact wellness.

- Lifespan and TMH seek to improve access to care by improving coordination and integration of services within the medical community. Care Management is a collaborative process of assessment, planning, facilitation, care coordination, evaluation and advocacy for options and services to meet the patient’s comprehensive health needs through communication and available resources to promote patient safety, quality of care, and cost-effective outcomes. Lifespan’s primary care practices provide care management services to medically qualifying patients through a workforce of approximately 35 Nurse Care Managers who are part of the Primary Care Team, located within provider offices. Collectively, the Lifespan practice-based Nurse Care Managers outreach to an average of approximately 1,000 patients per month.
- These Nurse Care managers are responsible for successfully engaging and managing high-risk patients with multiple comorbidities who are at risk for hospital admission or readmission; empowering patient self-management of chronic diseases through the provision of one-on-one Nurse Care Manager patient outreach, consults, and face-to-face visits; developing care plans for engaged high-risk patients collaboratively with the Care Team in order to implement interventions that assist in helping the

patient meet their goals and move them towards optimal health; involving patients in activities to improve their health (patient engagement), utilizing behavioral techniques (motivational interviewing), conducting health teaching, promoting self-management goals, providing device counseling and providing health counseling to patients and/or their families; and outreaching to patients after hospitalizations and emergency room visits to schedule appointments, perform and document medication reconciliation, and review after visit summary instructions with the patient.

1.12 TMH and its Lifespan affiliates formed a “Patient Access – Strategic Focus” working group whose mission is to improve patient access to services. Focus areas include reducing barriers to access, system-wide scheduling, reducing patient cancellations, referral guidance, and patient tracking.

- The “Patient Access – Strategic Focus” working group led a telehealth initiative which represents the interactive electronic exchange of information for the purpose of diagnosis, intervention, or ongoing care management between a patient and/or health care provider situated remotely. Telehealth was a critical offering during the peak of the COVID-19 pandemic and TMH, Lifespan and its affiliates continue to work to sustain that modality of care to improve access to care by reducing barriers, improving coordination, and reducing cancellations. TMH seeks to provide the community with real-time virtual visits, remote patient monitoring, and real-time secure confidential messaging. In 2021, this committee’s work was integrated into the Lifespan 2025 strategic plan to provide regular patient access and scheduling data reports.

Healthy Weight and Nutrition

Below are actions that TMH took between October 1, 2019 and September 30, 2022 to address the identified significant health need of healthy weight and nutrition:

2.1 Provide program orientation sessions for the Center for Weight and Wellness (CWW).

- The CWW had locations in Providence and East Greenwich, Rhode Island. To increase access to CWW, offered by RIH, individual orientation sessions were offered at both locations- weekly in Providence and as needed in East Greenwich. Language interpretation was also provided as needed. The program’s health educator met one-on-one with any patient requiring an interpreter and was also available to meet with any patient who could not attend a scheduled orientation session. For added convenience, the Center also offered an on-line orientation session that averaged ten participants per month.

2.2 Incorporate additional program offerings in the CWW at both the Providence and East Greenwich locations.

- The CWW launched yoga and fitness classes in FY '20 at a variety of intensity levels to ensure safety, however all exercise class were suspended in 2020 due to the COVID-19 pandemic. Yoga was switched to a virtual format with two levels of intensity- chair yoga (low intensity) and regular yoga (moderate intensity). Morning and afternoon classes were offered Monday through Thursday, with each class running 30-60 minutes. Chair yoga averaged four to seven participants per session and regular yoga averaged 2-3 participants per session.
- The CWW launched the Your Choice, Your Weight and Stress Management courses in FY '20 – both designed to attract patients who didn't need the higher intensity obesity intervention.
- The CWW piloted a 4-week “Fast Track” into weight loss, formerly named the Weight and Wellness Academy. This offering was attractive to patients who wanted to lose 10-20 pounds and/or improve their health by improving nutrition and exercise.
- The CWW introduced Hypnosis for Weight Loss in FY '20. This one-to-one intervention targeted patients for whom hypnosis is appropriate to catalyze behavior change.
- The CWW expanded its teen weight and wellness program for youth ages 14-18 years to the Providence location in January 2020. The physician leader and other team members met with community pediatricians, HCH clinicians, and others to promote the program and clarify the referral process.
- The CWW served approximately 500 active patients per year and an additional 200 “maintenance” patients but to align with current strategic priorities, the East Greenwich site of the WDD closed in July 2022 and the Providence site will close in November 2022.

2.3 Offer a variety of weight loss strategies available to Cardiac, Pulmonary, Vascular Rehab, and Health for Life Participants

- The CWW partnered with Rena Wing, Ph.D., the Director of the Weight Control & Diabetes Research Center at TMH to recruit patients into its weight management research programs, enrolling approximately 100 patients in FY '20-22.

2.4 Establish a relationship with Johnson & Wales University to engage a culinary student intern to offer supermarket tours and cooking demonstrations for patients with cardiac, pulmonary, and vascular disease.

- The CWW utilized a Johnson & Wales University intern for several semesters who performed supermarket tours and cooking demonstrations. Further, the CWW created a dietetic technician position for cardiac rehab filled by a Johnson & Wales University graduate.

2.5 Organize the “Food is Medicine” program in hospital, community, and school settings. This free, four-week class teaches participants how to prepare affordable and nutritious meals in order to improve their health, all on a limited budget. The LCHI plans to offer the “Food is Medicine” series in the TMH service area in each of the fiscal years 2020-2022.

- Food is Medicine Series and Healthy Cooking Demonstrations
 - FY ‘20: 12 sessions, 118 participants
 - FY ‘21: 19 sessions, 381 participants
 - FY ‘22 (through 6/30/22): 7 sessions, 152 participants

2.6 Offer the CDC-recognized Diabetes Prevention Program (DPP). The DPP is an evidence-based lifestyle change program targeting people at risk of developing Type 2 diabetes, helping to prevent or delay the onset of this chronic disease. Available in English and Spanish, the program consists of weekly one-hour sessions for the first six months that taper off to bi-weekly, then monthly sessions for the next six months. The program is free and participants, who must be at least 18 years old to join, receive program materials. The LCHI plans to offer a cohort of the year-long DPP in each of the fiscal years 2020-2022.

- DPP
 - FY ‘20: 1 cohort, 15 participants
 - FY ‘21: 3 cohorts, 38 participants
 - FY ‘22 (through 6/30/22): 4 cohorts, 54 participants

Cancer

Below are actions that TMH took between October 1, 2019 and September 30, 2022 to address the identified significant health need of cancer:

3.1 Recruitment of physicians for growth of the cancer research program that will allow the TMH community access to state-of-the-art research care and expertise.

- The LCI has been working on research and clinical alignment with Brown University since 2019. In May 2022, LCI named research expansion and collaboration with the Legoretta Cancer Center at Brown University as one of its three strategic priorities. Together, the LCI and Legoretta Cancer Center are working toward joint recruitments, translational research disease groups, Brown University Oncology Group collaboration for investigator-initiated trials, and pursuit of National Cancer Institute designation.
- Cancer clinical trials at Lifespan experienced continued growth despite the COVID-19 pandemic with more than 230 patients placed in clinical trials since FY '20, including multiple first-in-human trials.

3.2 Addition of navigation support, both clinical and non-clinical, to assist patients through the cancer experience as well as supporting community health events.

- The LCI partnered with Blackstone Valley Community Health Care to place a community outreach specialist in the Federally Qualified Health Center early in FY '22 and plans to do the same in partnership with the Providence Community Health Center by the end of FY '22. These outreach specialists provide community education, encourage cancer screening, facilitate the completion of referrals from the health centers to the LCI, and increase enrollment of underrepresented minorities in clinical trials.
- Additionally, the LCI has embedded an oncologist in a primary care practice in Bristol, Smithfield and East Greenwich, Rhode Island and does targeted outreach to CMPI and LPG primary care providers.

3.3 Implementation of a colorectal multidisciplinary clinic at TMH.

- The LCI operates under the RIH license with service locations at TMH, NH, and clinics in East Greenwich and Lincoln, Rhode Island. TMH hosts a colorectal multidisciplinary clinic and enjoys the participation of LCI colleagues who see patients at RIH and TMH. The colorectal multidisciplinary clinic meets weekly and includes participation from imaging, medical oncology, pathology, radiation oncology and surgery. This multidisciplinary clinic presented 324 cases in calendar year 2021.

Outreach and Education

Below are actions that TMH took between October 1, 2019 and September 30, 2022 to address the identified significant health need of outreach and education:

4.1 Cancer Care

- Due to the COVID-19 pandemic, the Rising Above Cancer 5K, which has since been renamed the LCI Malloy Strong 5K Run/Walk, was not held in FY '20 and FY '21. FY '22's LCI Malloy Strong 5K is scheduled for 9/24/22.
- Two Skin Check, skin cancer screening series of events, were held at the beginning of FY '20. Due to the COVID-19 pandemic, the annual summertime Skin Check series was suspended during the summers of 2020 and 2021. Seven Skin Check events are scheduled between June and September of FY '22.
 - Skin Check on 10/5/19 screened 51 individuals
 - Skin Check on 10/8/19 screened 32 individuals
- Six Tar Wars workshops, a school-based tobacco prevention program, were delivered in FY '20 to 263 students. Due to the COVID-19 pandemic, Tar Wars was suspended in February 2020 for the remainder of the fiscal year and all of FY '21 and FY '22.

4.2 Congestive Heart Failure (CHF) Clinic and outreach

- The CHF Clinic met and maintained its goal of providing post-hospitalization follow-up within five to seven days of discharge, moving this to a monitoring status in February 2021. In addition, the clinic creates a discharge workflow within 24-48 hours of hospital discharge. These interventions have helped to reduce readmissions rates below 10%.
- The CHF Clinic employs a multi-disciplinary, interagency approach that brings providers, care navigators, and external partners together weekly for case conference and monthly for complicated care presentation. This high level of coordination bolsters continuity of care through better coordination of services and communication with internal and external multidisciplinary teams.
- To better support patients' transitions from one care setting to the next, the CHF Clinic provides patient education teaching tools in English, Spanish and Portuguese on topics including nutrition, salt intake, dietary concerns, and signs & symptoms of risk. The Clinic provides patients with bathroom scales and education for patients to track health indicators at home, all coordinated with their community-based service partner- HopeHealth. Also, the Clinic added a heart failure hotline to quickly address patients' concerns.

- The CHF Clinic has increased the utilization of palliative care through its Hearts at Home program, to ensure that the right care is provided at the right time and in the right place, in better alignment with patient needs. A “goals of care” conversation happens with every patient to craft a patient-centered palliative care plan. This program, delivered in partnership with HopeHealth, serves the frailest of high-risk patients.

4.3 Increase referrals to Cardiac Rehabilitation (CR)

- In January 2021, the Cardiovascular Institute (CVI) launched a best practice advisory, a decision support prompt, in the electronic health record to precipitate appropriate referrals to CR, with a target of 80% at TMH. Based on documented referrals to CR in the health record, TMH has improved from 34% in 2017 to a record high of 69% through March 2022, well on the way to the target of 80%. In addition, the CVI distributed brochures to ambulatory physician providers to inform them of treatment options around the state.
- The CVI initiated a workflow modification that now allows advanced practice providers to refer patients to CR with a co-signature from a referring provider to meet Medicare requirements.
- The CVI began performing patient consults at the bedside prior to hospital discharge. By engaging patients while they are still admitted to the hospital to provide education about CR, referrals to CR are now happening even if patient is being discharged to a skilled nursing facility before they can begin CR. This bedside consultation for inpatients has resulted in more than 30% inpatients referred to CR, as compared to more than 60% of referrals coming from outpatient providers. CVI is continuing to work to close the gap in referral rates.

4.4 Improve education and awareness to health care providers regarding benefits of CR for the purpose of secondary prevention.

- Despite interruptions due to COVID-19, the CVI delivered education and increased awareness of CR services through grand rounds, departmental in-services, and presentations at faculty meetings.
- In FY '22, Wen-Chih Hank Wu, MD, MPH, Director of the Lifespan CVI Wellness and Prevention Center, presented at a CVI faculty meeting and provided an in-service to all front office staff in all CVI ambulatory clinics.
- Also in FY '22, Dr. Wu delivered two presentations to inpatient providers at virtual faculty meetings

4.5 Improve education and awareness to community members regarding cardiac disease management through presentations.

- Despite interruptions due to COVID-19, the CVI delivered education and increased awareness of CR services to lay audiences at community events.
 - Wen-Chih Hank Wu, MD, MPH, Director of the Lifespan CVI Wellness and Prevention Center and Julianne DeAngelis, Manager of CR presented at a virtual community health ambassador meeting on 2/8/22 with 17 registrants.
 - The CVI partnered with the local news leader, Channel 10, to feature CR services during two Health Check segments, one of which in 2022 featured a Providence patient.
 - Five CR alumni events have been held in FY '22.
 - The CVI participated in the American Heart Association's 2022 Southern New England Heart Walk and were highest fundraising team.
 - Due to the pandemic, the Mended Heart support group for high-risk patients that met quarterly and the and the periodic Family Night events have been suspended.

4.6 Offer Outpatient Diabetes Management workshops.

- The CVI offers small group diabetes education for its patients quarterly, to help patients with diabetic co-morbidity manage their health. After offering two virtual, 6-week cohorts in FY '21, the CVI pivoted to in-person workshops in FY '22. Each class is 2 hours in duration and averages five participants.

4.7 Offer Tobacco Consultant Program to individuals who currently use tobacco products or who have quit in the past 6 months.

- The tobacco counselor left Lifespan in November 2021 and a new counselor was identified who is pursuing certification. Certification of a new tobacco counselor is expected in the Fall of 2022 with an expectation of serving 25-30 patients per week.

4.8 Offer Pulmonary Disease Management for patients with COPD and respiratory problems.

- The pulmonary rehabilitation program has grown more than 50% since the onset of COVID-19. As of November 2021, COVID is a qualifying diagnosis for pulmonary rehabilitation. The pulmonary rehabilitation program is now seeing approximately 425 visits per month. At the same time, the patient mix in pulmonary rehabilitation has gone from 6% non-English speaking to 14%; notably, 30% of COVID patients enrolling in pulmonary rehab are non-English speaking. In response to the patient volume and diversity of needs, the pulmonary rehabilitation program is seeking resources to provide more psycho-social support to long-COVID patients in the future.

4.9 Offer Health for Life Cardiac Risk Reduction Program

- The CVI offers the Health for Life Cardiac Risk Reduction Program- a self-pay program that provides exercise, behavior modification, and risk reduction classes for the purpose of primary prevention. Approximately 10% patients are referred into this program. To grow participation, the CVI is partnering with Blue Cross and Blue Shield Rhode Island to create a pathway for their members with a diagnosis of obesity or diabetes to be referred to the East Greenwich CR site to participate in this prevention program.

4.10 Charity fundraising-Annual participation in the American Heart Association Heart Walk.

- Lifespan organizes fundraising for the annual American Heart Association Heart Walk on behalf of TMH and the other Lifespan affiliates. Fundraising for the American Heart Association supports research to reduce the burden of heart disease. Lifespan fundraising totaled-
 - 2020: \$1,901.67 (Heart Walk canceled due to COVID-19)
 - 2021: \$18,507 (virtual Heart Walk due to COVID-19)
 - 2022: \$ \$108,902.19 plus a \$20,000 Lifespan sponsorship of Heart Walk and an additional \$15,000 sponsorship of the American Heart Association's Go Red for Women event in February 2022

4.11 Offer small group Heart Failure education classes.

- Cardiology fellows provide physician supervision and meet heart failure patients enrolled in CR year-round. These small group education offerings are believed to have contributed to patients' enrollment in the Health for Life Cardiac Risk Reduction Program, Dean Ornish Intensive Cardiac Rehabilitation Program, diabetes outpatient education, quarterly consultations with a dietician, mindfulness stress reduction classes, tobacco counseling, vascular rehabilitation, and pulmonary rehabilitation.

4.12 In coordination with Lifespan affiliates, continue to provide community-based education programs like Avenues of Healing, tobacco cessation programs, and Cancer Survivors Day events.

- Avenues of Healing is an annual breast cancer educational conference designed for breast cancer survivors and their families, friends, caregivers, and other support groups. This free program attracted 160 participants in FY '20 who came to learn about the latest in treatment, research, and healthy survivorship.
- In FY '21, in lieu of Avenues of Healing, the LCHI and LCI decided to partner with the Gloria Gemma Breast Cancer Resource Foundation to be the signature sponsor of their annual Passport to Survivorship event, that also targets breast cancer survivors and caregivers but attracts an audience of 500+ participants. Due to COVID-19, the program had to be delivered virtually via social media. The six featured LCI presentations that were posted on 10/3/21 and promoted for several weeks generated 19,774 social media impressions on Facebook and YouTube.
- LCHI and LCI are again sponsoring Passport to Survivorship in 2022 with an in-person event scheduled for 10/1/22 with eight LCI speakers.
- Cancer Survivors Day events were cancelled in FY '20 and FY '21 due to COVID-19. An in-person Cancer Survivors Day event for FY '22 is scheduled for 9/11/22.
- Six "Tar Wars" workshops, a school-based tobacco prevention program, were delivered in FY '20 to 263 students. Due to the COVID-19 pandemic, Tar Wars was suspended in February 2020 for the remainder of the fiscal year and all of FY '21 and FY '22.

4.13 In partnership with TMH’s Lifespan affiliates, organize with schools, employers, and churches to offer educational workshops/programs at their locations.

- The LCHI offered a variety of community-based educational workshops and programs during this reporting period that served the TMH service area, including:
 - Tar Wars
 - FY ‘20: 6 workshops, 263 students
 - FY ‘21: suspended due to COVID-19
 - FY ‘22: suspended due to COVID-19
 - Safe Sitter
 - FY ‘20: 18 classes, 136 students
 - FY ‘21: 27 classes, 178 students
 - FY ‘22 (through 5/31/22): 16 classes, 147 students
 - Food is Medicine Series and Healthy Cooking Demonstrations
 - FY ‘20: 12 sessions, 118 participants
 - FY ‘21: 19 sessions, 381 participants
 - FY ‘22 (through 6/30/22): 7 sessions, 152 participants
 - Lifespan Community Health Ambassadors
 - FY ‘20: 9 sessions, 131 participants
 - FY ‘21: 12 sessions, 169 participants
 - FY ‘22 (through 6/30/22): 9 sessions, 146 participants

Mental and Behavioral Health

Below are actions that TMH took between October 1, 2019 and September 30, 2022 to address the identified significant health need of mental and behavioral health:

5.1 In response to the opioid epidemic in Rhode Island, Governor Gina Raimondo assembled an Overdose Prevention and Intervention Task Force, to develop a strategic plan to address this public health crisis. The initial action plan emphasized the strategic pillars of prevention, rescue, treatment, and recovery. In 2019, this action plan was updated to build upon past accomplishments and progress made. This revised plan proposes five additional cross-cutting principles that aim to guide future initiatives, including: integrating data to inform crisis response; meeting, engaging, and serving diverse communities; changing negative public attitudes on addiction and recovery; universal incorporation of harm-reduction; and confronting the social determinants of health.

The Lifespan system is uniquely positioned to participate in these State initiatives to have a significant impact on the opioid epidemic. This mission can be achieved by leveraging expertise across the system and improving access to and awareness of lifesaving behavioral health services.

- Lifespan remains invested in working to address the overdose epidemic as evidenced by the participation of multiple different employees on the Governor’s Overdose and Addiction Task Force and its sub-committees. A Lifespan leader also serves as the chairperson of the statewide Opioid Settlement Advisory Committee, which works in collaboration with the Governor’s Overdose and Addiction Task Force to apply opioid manufacturer settlement funds in alignment with the priorities identified by the Task Force.

5.2 In fiscal year 2020, Lifespan will build upon existing capabilities to ensure that patients meeting criteria for a substance disorder are appropriately assessed and linked to treatment. In clinical settings across the system, patients presenting with a substance use disorder will be systematically identified through validated screening measures as part of the standardized initial admission assessment. Comprehensive evaluations will provide treatment recommendations and linkage to community care in a timely manner. Assessment and treatment initiation will continue to occur at various entry points, to meet patients where they are at, and enhance the likelihood of treatment access/retention.

- The Addiction Medicine team takes a multidisciplinary approach to identifying substance use disorders, initiating medication when appropriate, and providing timely discharge planning to community-based care in collaboration with internal medicine physicians. This approach emphasizes initiating substance use treatment when patients are medically admitted to capitalize on readiness to change and provide stabilization.
- The Lifespan Recovery Center (LRC) provides multidisciplinary, recovery-oriented, services and emphasizes rapid access to treatment. The LRC specializes in addressing substance use and common co-occurring psychiatric conditions through counseling and pharmacology. The LRC partners with key stakeholders to meet the needs of the community and provide education about available services. The LRC is also working toward establishing a “low-threshold” model of addiction treatment which emphasizes engagement and harm reduction to reduce barriers to care. Features of this model include performing unobserved (home) medication inductions and offering walk-in services that do not require adhering to a formal appointment. TMH initiated a Buprenorphine Hotline run by emergency department (ED) physicians who answer calls to patients. A physician completes a phone assessment with a patient and sends a “bridge” prescription of suboxone (if indicated) to the pharmacy. Patients are then offered walk-in hours at the LRC for ongoing care.

- The TMH Emergency Department provides routine trainings to educate physicians about the nature and treatment of substance use in order to promote opportunities for intervention in the ED. All ED physicians are able to initiate medication-assisted treatment in the ED. In FY '22, Lifespan achieved 68 Drug Addiction Treatment Act (DATA) waived ED physicians and 10 advanced practice providers. Within the psychiatry department at TMH, there are an additional five physicians and one nurse practitioner who can initiate medication-assisted treatment in the ED.
- Lifespan remains committed to supporting research aimed at better understanding and addressing substance use disorders, particularly opioid use disorder. Since Lifespan affiliate, RIH received an \$11.8 million federal grant in 2018 to create the first of its kind Center of Biomedical Research Excellence (COBRE) on Opioids and Overdose, four research project leaders have graduated from the COBRE and gone on to receive independent funding, there have been 84 publications by COBRE funded investigators, and 19 publications have cited the COBRE as providing material support to their studies.³⁰

5.3 In fiscal years 2020 and 2021, Lifespan's goal is to continue to strengthen existing capabilities and promote integration across the system, facilitate rapid access to treatment through the development of innovative clinical models, and provide patient-centered care that meets a range of needs by creating other levels of care.

- Drawing from existing models of care in other large hospital systems, there is evidence to support the utility of offering a "Bridge" clinic- a low-threshold transitional clinic for the treatment of substance use disorders for patients who are not yet established in outpatient addiction care. These types of programs emphasize treatment on demand by offering walk-in services seven days per week. The goal of this program is to engage patients in treatment when they are ready to access help, stabilize the patient, and eventually refer to a long-term outpatient setting. Due to the COVID-19 pandemic, plans for a Bridge Clinic were paused with preliminary development currently underway in FY '22.
- While outpatient treatment is generally safe and effective for many individuals, there is a growing need to offer more intensive services to those who are struggling to stabilize. Further, TMH continues to witness higher rates of polysubstance use across its service area (e.g., opioid and cocaine use). This clinical presentation may benefit from alternative intervention strategies, particularly since there are no current pharmacological treatment options to address cocaine use disorder. The Substance Use Disorders Treatment Program at RIH 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.

- Specialized programs to address vulnerable/under-represented populations including youth and racial/ethnic minorities.
- The LRC provides substance abuse treatment for opioids, marijuana, alcohol, heroin, cocaine, and other drugs as well as behavioral addictions (e.g. gambling). Treatment includes medication consultations and management for addictive disorders and dual diagnoses (co-occurring psychiatric illness). Individualized recovery plans may include medication-assisted treatment for patients with an opiate use disorder, medication for an alcohol use disorder, medication, and therapy to treat co-occurring psychiatric conditions, individual and group therapy, case management/care coordination, and peer support. The LRC customizes treatment to meet each patient's particular needs, drawing from a range of treatments to address substance use accompanied by other common mental health conditions such as PTSD, anxiety, or depression.

5.4 Offer behavioral therapy counseling within behavioral change strategies pertaining to risk reduction for patients with cardiac and pulmonary disease. Offer psychology intervention for psychosocial counseling pertaining to depression, anxiety, and adjustment to illness for individuals with cardiac and pulmonary disease.

- The Center for Weight and Wellness (CWW) partnered with Rena Wing, PhD, the Director of the Weight Control & Diabetes Research Center at TMH to recruit patients into its weight management research programs, giving them access to a behavioral therapist and enrolling approximately 100 patients in FY '20-22.

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 TH, prioritize those needs, and identify the resources, facilities, and programs to address them. In order to identify the significant health needs of this community, primary quantitative and qualitative data and secondary quantitative data were collected. In addition, it is critical to highlight the context of the ongoing COVID-19 pandemic which has impacted the health concerns of the communities served by TMH as well as the hospital's provision of health services.

A. Rhode Island COVID-19 Experience

On February 27, 2020, the first COVID-19 patient in Rhode Island was admitted to TMH, moving the nation's smallest state onto the worldwide coronavirus map. After that date, cases began to increase quickly throughout the state. The first stay-at-home order was issued on March 20, 2020, requiring all Rhode Island residents to stay at home unless getting food, medicine, or other essentials.³¹ Originally scheduled to remain in effect until April 13, the order also banned gatherings of more than five individuals and required out-of-state visitors to quarantine for 14 days. As cases increased, Governor Gina Raimondo announced on April 23 that schools would remain closed for the rest of the academic year.³² Many hospitals also postponed elective and non-emergent procedures until a later date. By April 28, 2020, COVID hospitalization rates were at their first all-time high at 373, with 88 of these patients in the ICU and 59 on ventilators.³³ Eventually, hospitalization rates and case numbers began to decrease, reaching a low on July 7, 2020 with only 58 Rhode Islanders hospitalized due to COVID.³⁴

During the month of July, the state started to slowly re-open – allowing some beaches, restaurants, and entertainment businesses to resume operations (with minimum capacity), and hospitals to begin performing elective procedures again.³⁵ By fall, most schools were also able to open up again. After an increase in COVID cases in November 2020, Governor Raimondo announced a statewide pause — reclosing many bars, gyms, and recreational venues.³⁶ By December 15, 2020, hospitalization rates reached a high of 514 in-patients.³⁷

After this COVID peak, rates slowed for a period, partly due to the distribution of vaccines that started in February 2021 with doses initially being offered to individuals aged 75 and older.³⁸ After first distributing the vaccine to those most at risk, Rhode Island gradually allowed other groups of residents to register.

On July 20, 2021, hospitalization rates hit another low when only 23 patients were admitted with a diagnosis of COVID. However, as the season changed to winter, rates spiked again with a new all-time high of 618 inpatients on January 17, 2022.³⁹ Despite this being the highest record of hospitalizations, the greatest number of COVID-related fatalities still occurred at the beginning of the pandemic.⁴⁰

Since the beginning of 2022, COVID rates have decreased, with a slight increase as of the drafting of this report (June, 2022). Overall, the town of Central Falls has the highest rate of COVID cases in the state, followed by Pawtucket, East Greenwich, and Providence (respectively at 2nd, 3rd, and 4th place).⁴¹ In contrast, the towns of Little Compton and Jamestown have the lowest COVID rates and related hospitalizations.⁴² Across the state of Rhode Island, over 8 million COVID tests have been administered; approximately 400,000 positive cases have been reported; and over 3,500 COVID-related deaths have occurred.⁴³ As

of the June 2022, 98.5% of the Rhode Island population is at least partially vaccinated; 83% have completed their primary series; and 41.2% have received boosters.⁴⁴ These statistics vary depending on age, gender, and race. For example, 99% of residents between the ages of 70 and 79 have received their primary COVID-19 vaccine series while those between 19 and 24 have a lower primary vaccination rate of 62.2%.⁴⁵

Specifically at TMH, visitation was suspended on March 9, 2020, the same day the Governor declared a state of emergency. By March 18, 2020, elective procedures at TMH were suspended. April 27, 2020 marked the day the Lifespan Alternative Hospital Site, operated by RIH and one of two alternative hospitals stood up in Rhode Island, was ready for operations. Just two days later, the state experienced the largest one-day volume of COVID-positive inpatients (241), as the first wave crested. With COVID cases declining, restrictions on elective procedures were lifted on May 11, 2020.⁴⁶ Six months later, on December 14, 2020, the second COVID wave peaked just as the alternative hospital site began admitting patients. TMH began vaccinating frontline workers with the Pfizer COVID-19 vaccine in mid-December 2020 and by October 1, 2021, 98% of Lifespan's workforce was vaccinated against COVID-19.⁴⁷ TMH clinical and research milestones include⁴⁸:

- Lifespan researchers were at the forefront of investigating the potential of remdesivir, the experimental antiviral drug from Gilead Sciences, Inc., to shorten the course of COVID-19 illness in patients being treated at TMH, NH and RIH.
- Rhode Island is one of only three sites in the nation to be selected by the CDC for a study involving widespread antibody testing for the COVID virus.
- The National Institute of Allergy and Infectious Diseases awarded Karen Tashima, MD, an immunologist based at TMH, a grant of approximately \$1.7 million to study the efficacy of a Novavax vaccine candidate to prevent COVID-19. Lifespan is one of about 115 sites in the United States and Mexico participating in the trial.
- TMH was named a clinical trial site for the National Institutes of Health ACTIV-2 study, testing potential breakthrough treatments for COVID-19 outpatients.
- As part of its continued response to the COVID-19 pandemic, TMH physician, Jennie Johnson, MD, opened a clinic for patients afflicted with long-COVID. This condition occurs when patients have ongoing COVID symptoms for a month or more after the initial infection.

Figure 1. COVID-19 Hospitalizations in Rhode Island, February 27, 2020 – May 21, 2022

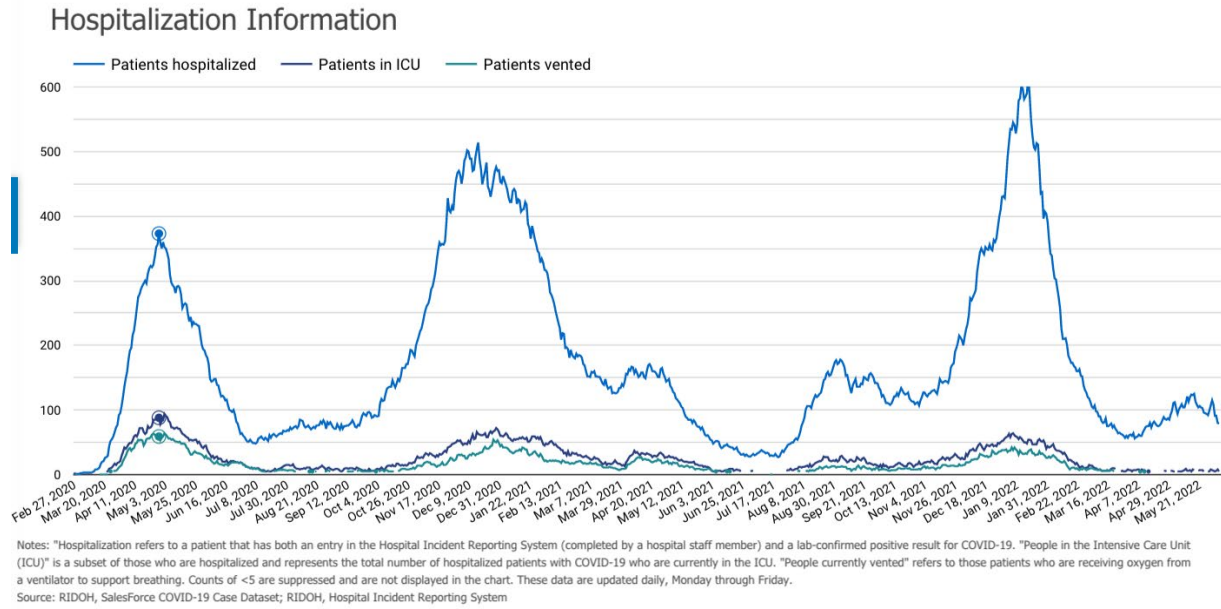
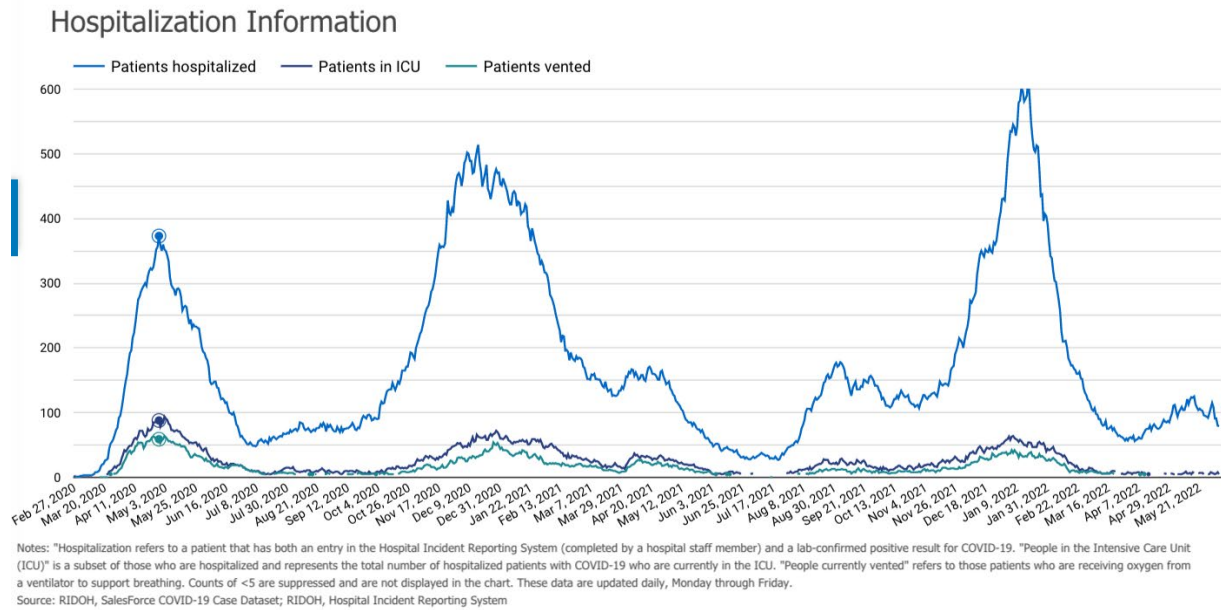


Figure 2. Comparison of COVID-19 Cases and Deaths in Rhode Island, April 1, 2020 – April 1, 2022



B. Primary Data Sources

Primary data sources used for this report include community health forums, individual surveys, and key informant interviews. Secondary data sources include national and local publications of data that is specific to the state of Rhode Island and the TMH service area.

Community Health Forums

Qualitative data was collected through Community Health Forums (CHF) to solicit input from individuals representing the broad interests and perspectives of the community. Community forums are a standard qualitative social science data collection method, used in community-based or participatory action research. Participants in the CHF included members of the medically underserved, low-income, and minority populations in the TMH service area.

Two CHF were held on May 10, 2022 and May 14, 2022 in the TMH service area, with 23 participants. Participants were recruited using social media, electronic newsletter, email, and word of mouth. Virtual (Zoom) forums were scheduled at various times of the day. All CHF were open to the public and participants were fully engaged throughout the 90-minute discussion. *See Appendix A.*

Staff from the LCHI served as a hospital liaison to help plan and facilitate the CHF. 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 CHF was the involvement of Community Liaisons. Two people representing the diverse populations served by TMH were hired as consultants to assist with the CHNA. These Community Liaisons helped plan the CHF, recruited participants, and co-facilitated the forums. Appendix B contains a bio-sketch for each of the TMH Community Liaisons and Appendix C contains the Community Liaison position description. Community Liaisons were chosen through a competitive selection process and completed a 90-minute training prior to leading the CHF. The training included project planning tips, role-playing activities, conflict management tips, and logistical expectations. Community Liaisons were responsible for co-facilitating the discussion at the CHF with their hospital liaison.

Each CHF was 90 minutes in duration and was co-facilitated by the hospital and Community Liaison. Discussion began with a brief presentation of TMH's 2019 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. Through discussion, the facilitators generated consensus on the participants' health concerns, their prioritization of those concerns, and their ideas for how TMH could respond to those concerns. See Appendix D for a sample CHF agenda. The input gathered during the CHF 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 hospital liaison to debrief the forums and offer their interpretation of the findings to ensure all input was captured and that 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, an online survey was promoted, and paper surveys were distributed and collected by LCHI staff at community events they attended in June 2022 (*See Appendix E*). The surveys addressed the same questions as the CHF. Twenty individual surveys were received for TMH. Tables 5 and 6, below, summarize the input received for TMH from individual surveys.

Table 5. Health Concerns Selected by Respondents to TMH Community Survey (n=20)

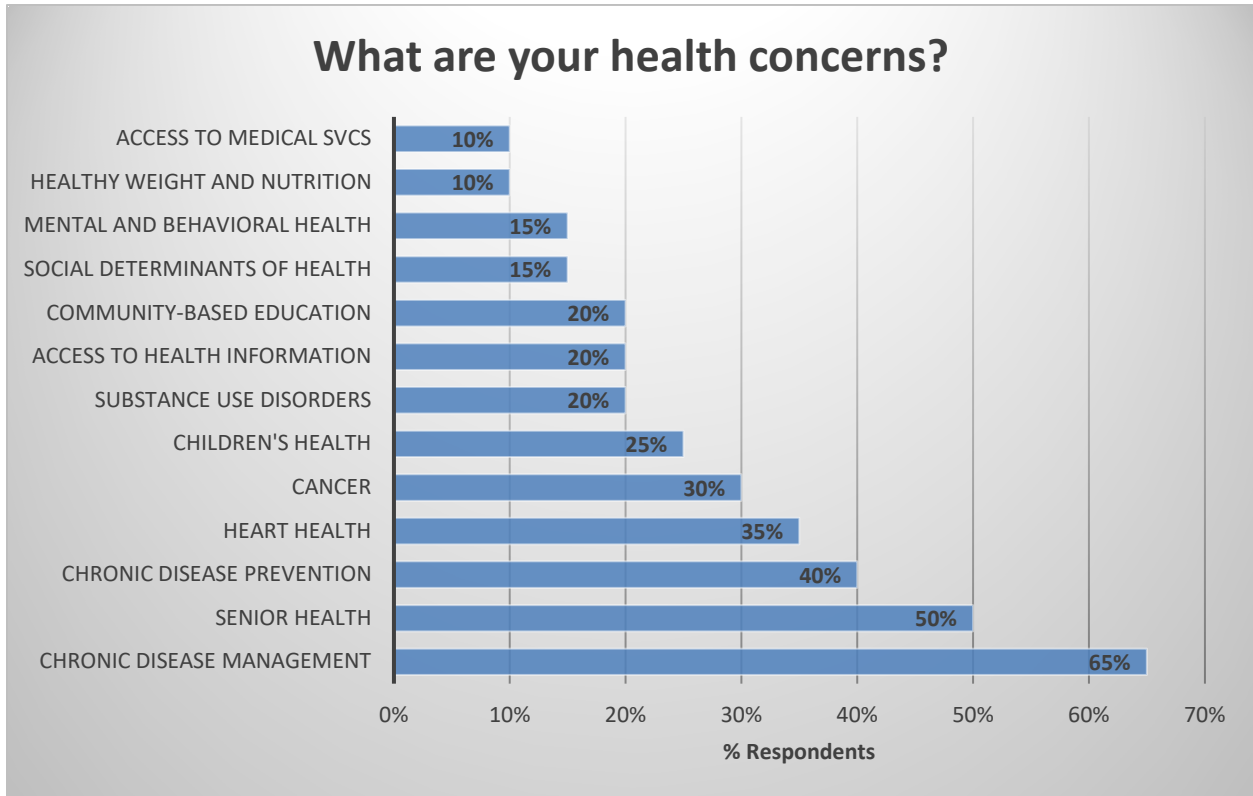
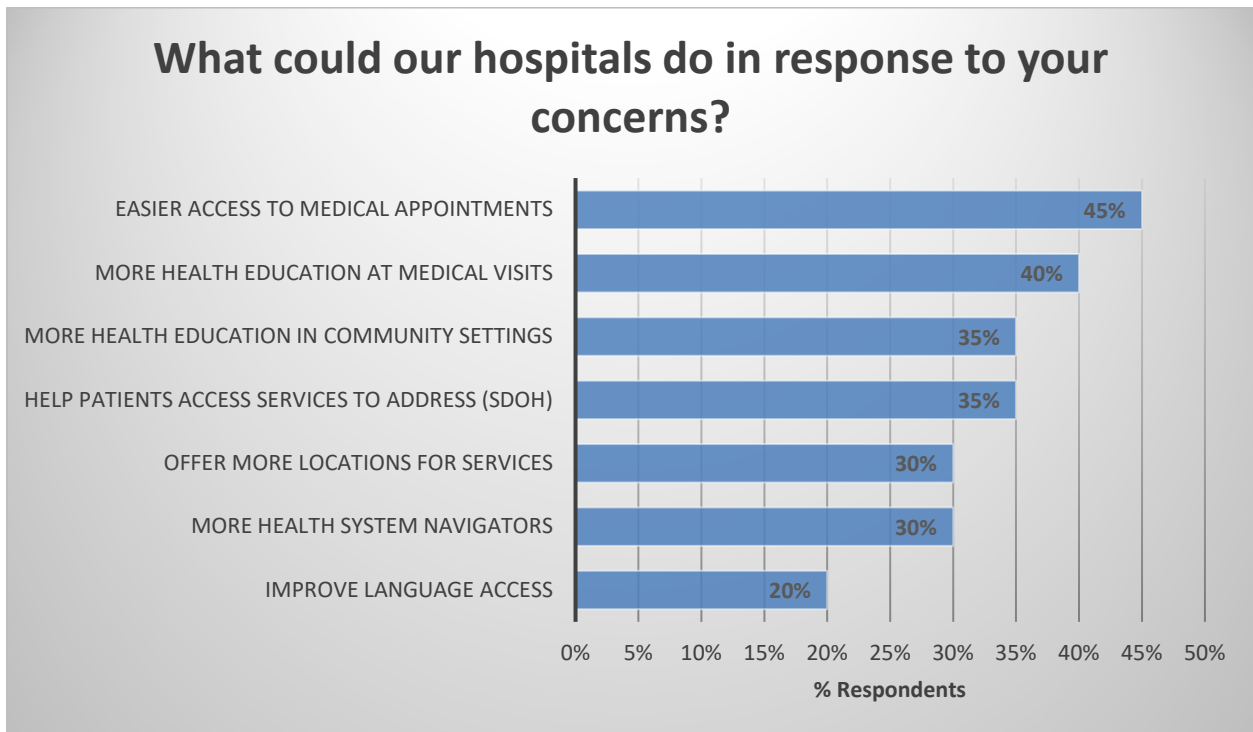


Table 6. Implementation Recommendations Selected by Respondents to TMH Community Survey (n=20)



Key Informant Interviews

Public health and health policy leaders who could inform the 2022 CHNA process and had knowledge, information, or expertise about the community that NH serves were invited to be interviewed as part of the CHNA. Key informant interviews were conducted with these leaders to supplement the other quantitative and qualitative data collected. Key informants included:

- Chief Strategy Officer, Executive Office of Health and Human Services, State of Rhode Island
- Director of Policy, Planning and Research, Executive Office of Health and Human Services, State of Rhode Island
- Director, Health Equity Institute and Maternal and Child Health, Rhode Island Department of Health
- Vice President and Chief Medical Officer, Providence Community Health Centers
- Executive Director, Rhode Island Parent Information Network
- Director, Community Health Worker Association of Rhode Island
- Executive Vice President and Chief Medical Officer, Blue Cross Blue Shield Rhode Island

The key informants identified the following statewide health priorities, with the first three named by multiple leaders:

- Apply hospital resources to address the social determinants of health, including housing, food, transportation, and employment, among other barriers to care.
- Improve access to behavioral health care for children and adults, especially noting access challenges for children and the burden of substance misuse among adults.
- Ensure the provision of equitable care with particular attention to ensuring equal access to high quality care for persons regardless of their race, ethnicity, language spoken or disability status. They noted that equitable care also required a workforce representative of the patients and implementation of the principles of anti-racism.
- Improve access to primary and specialty care locally.
- Grow the healthcare and behavioral health workforces through career pathways, higher reimbursement rates, and increased compensation.
- Improve access to community-based services including home-based therapeutic services for children with special needs.
- Reduce racial and ethnic disparities in maternal and child health.

The interviewed leaders noted several opportunities for hospitals to contribute to efforts to address these goals including: innovate around care delivery models for behavioral health services for adults; invest in systems and technology to facilitate improved care coordination between primary and specialty care, as well as hospital and community-based providers; partner with state and community-based agencies on workforce development pathways for high-demand roles- notably behavioral health providers and community health workers; provide assistance to patients to help them navigate the healthcare system; and sustain access to telemedicine that was made available during the peak of the COVID-19 pandemic.

TMH Patient Data, Fiscal Years 2020-2022

Lifespan's Planning Department analyzed TMH patient data on patients, discharges, and encounters and disaggregated by town of residence, age, race, ethnicity, and language spoken for fiscal years ending September 30, 2019 through September 30, 2021. This inpatient, outpatient, and ED data is important for understanding trends in utilization of hospital services.

C. Secondary Data Sources

Although they may vary in sample size, data collection methods, and measures reported, all secondary sources are publicly available. Also, in each case, the most current publicly accessible data is presented. Each data source is described in detail below.

HEALTHY WEIGHT & NUTRITION

State of Childhood Obesity – Rhode Island, 2017-2020⁴⁹

The *State of Childhood Obesity* website by the Robert Wood Johnson Foundation collects the best-available data on childhood obesity rates across the country and makes recommendations on key policies to prevent obesity. The site also assesses how federal nutrition policies impact Rhode Island and provides data on health behaviors and outcomes. According to the site, 16.7% of Rhode Island's youth aged 10 to 17 have obesity, ranking the state 19th in the country. In addition, 30.1% of Rhode Island's adults have obesity, 10.4% have diabetes, and 33% have hypertension. The site reports that only 21.1% of Rhode Island's high schoolers are physically active for at least 60 minutes, and states that 11% of the state's children are food insecure.

*Status Report on Hunger in Rhode Island, 2021*⁵⁰

Each year, the Rhode Island Community Food Bank releases its *Status Report on Hunger*, calling attention to the issues around hunger in the state. According to the website, food insecurity remains a widespread issue. Among all households in Rhode Island, 18% cannot meet their basic food needs, equaling one in six households. For RI families with children, the risk of hunger is higher as one in four households are food insecure. According to the RI Life Index, racial and ethnic disparities persist. Fourteen percent of White households reported food insecurity, while the rate was significantly higher among non-White households: 34% for Black households, 34% for Latinx households, and 25% among other groups including Asian, Native American, and multi-racial households. The site also notes that since key federal government programs addressing hunger issues during the pandemic have ended, the Rhode Island Community Food Bank distributed 15.1 million pounds of food in 2021 in order to meet the high demand for assistance — a statewide record.

*Rhode Island SNAP Report, May 2021*⁵¹

The Supplemental Nutrition Assistance Program (SNAP) is one of the largest programs offered by the Rhode Island Department of Human Services (DHS). By providing monthly benefits, this program helps low-income individuals and families buy food. During COVID-19, this service proved to be critical. The *Rhode Island SNAP Report* provides a snapshot of caseloads, demographic data, and other helpful program information broken down by year.

Caseload data from March 2021 showed that the majority of SNAP recipients identify as White for their primary race. In that time period, 32% of SNAP participants were under the age of 18, and 20% of SNAP cases reported a head of household between the ages of 25 and 34. Sixty percent of the SNAP caseload also received Medicaid benefits. As for languages spoken in SNAP households, 84% of customers reported English as their primary spoken language (74,846 out of 89,211). The next highest spoken languages represented were Spanish (14 %) and Portuguese (1%). According to the report's table, *SNAP Caseload by City of Residence*⁵² from 2020-2021, the town of Charlestown, Rhode Island saw the largest decrease in the state by 6.39%. In areas covered by this report, the city of Providence saw a smaller decrease of only 2.85%.

The mission of the Rhode Island Food Policy Council (RIFPC) is to promote a more equitable, economically vibrant, and environmentally sustainable food system in Rhode Island. The Council creates partnerships, develops policies, and advocates for improvements to the local food system to expand its capacity, viability, and sustainability. Their 2020 annual report, titled *Now More Than Ever: Building a Just, Resilient Food System*, offers an analysis of the jobs available or growing within the food industry. The Council calculated 75,800 total jobs in the food system in Rhode Island. According to the report, more than 3,700 residents have been informed about the state’s food system through social media platforms. Another takeaway is that one quarter of RI households lacked adequate food during the COVID-19 pandemic.

CHRONIC DISEASES

*Status of Cancer Disparities Report – American Cancer Society, 12/14/2021*⁵⁴

On December 14, 2021, the ASCO Post’s headline read: *American Cancer Society Releases Updated Report on Status of Cancer Disparities in the United States*. Published in *CA: A Cancer Journal for Clinicians*, the American Cancer Society’s report details the status of cancer disparities in 2021, including comprehensive data on racial, ethnic, and socioeconomic factors. The report also discusses why some of these disparities exist, reviews different programs targeting cancer disparities, and offers policy recommendations.

The report showed substantial variations in death rates overall for specific cancer types and by race/ethnicity, socioeconomic status, and geographic location. Some findings include:

- Black women have a 12% higher overall cancer death rate than their White counterparts despite having an 8% lower incidence rate.
- Kidney cancer death rates by sex among American Indian/Alaska Native people are ≥64% higher than the corresponding rates in each of the other racial/ethnic groups.
- The five-year relative survival for all cancers combined is 14% lower among residents of poorer counties than among residents of more affluent counties.

*United States Cancer Statistics: Data Visualizations – Rhode Island*⁵⁵

This Centers for Disease Control (CDC)’s website, *United States Cancer Statistics: Data Visualizations*, displays basic information on cancer statistics for each state as well as comparisons by state. According to 2018 incidence data:

- Rhode Island ranks 35 for the rate of new cancers in the US (456.8 per 100,000 people)

- The top two cancers in Rhode Island are female breast cancer and prostate cancer
- The cancer with the highest death rates in RI is lung and bronchus

Rhode Island Department of Health – Cancer Data, 2019⁵⁶

The Rhode Island Cancer Registry (RICR) is managed by the Rhode Island Department of Health (RIDOH) and is the central repository of information about cancer. This valuable tool identifies at-risk populations, monitors incidence trends, and evaluates cancer control initiatives. In 2019, the rate of incidence of all cancers in Rhode Island was 2,370 cases per 100,000 for residents aged 80+, and the rate was 1,777 for residents aged 60-79. The top cancers in the state included breast (female only), prostate (male only), and lung and bronchus. The most common cancer site for both RI men and women is trachea, lung, & bronchus.

Rhode Island Department of Health – Diabetes Data, 2020⁵⁷

The Rhode Island Department of Health offers a quick data page on *Diabetes Data* to provide general information about RI individuals with diabetes as well as the struggles they face. The site offers self-reported information on diabetes risk factors and healthcare access. In 2020, 10.3% of Rhode Island adults (88,400 people) have been diagnosed with diabetes with an additional 18,800 people who have been told they are prediabetic or have borderline diabetes. However, the CDC estimates that 23.8% of all people with diabetes do not know they have it. In Rhode Island, this represents an additional 24,800 people.

Health in Rhode Island– Diabetes prevalence, 2020⁵⁸

Convened and led by the Rhode Island Foundation, a group of local health and health care industry experts set a 10-year plan for improving health in Rhode Island called “Health in Rhode Island: A Long-Term Vision.” Their website, *Health in Rhode Island – Diabetes prevalence*, offers a quick datasheet with basic statistics about diabetes in Rhode Island. It also compares the state’s rates to the national average and displays prevalence data by demographics. In 2016, RI’s prevalence was 9.8%. Four years later, in 2020, the prevalence of diabetes in RI was 10.3%, which was lower than the national average of 10.8%. Twenty-two percent of individuals over the age of 65 in the state have diabetes; 20.5% of those with less than a high school education have the disease; and 19.4% of those who earn less than \$15,000 per year reported having it.

*Centers for Disease Control and Prevention – Diabetes Report Card 2021*⁵⁹

The CDC's *Diabetes Report Card 2021* gives a comprehensive view on diabetes in the US using the most current data available. The site covers trends on the incidence and prevalence of diabetes, as well as preventative care practices, self-management, and education. In 2020, diabetes was the 8th leading cause of death in the United States. During the COVID-19 outbreak, diabetes was identified as an underlying condition that increases the chance of contracting a severe illness. Although diabetes incidence has decreased since 2018, diabetes and prediabetes prevalence have increased. Citizens who identify as American Indian or Alaskan Native, non-Hispanic Black, Hispanic, and/or non-Hispanic Asian are more likely to be diagnosed with diabetes than non-Hispanic or White people.

*United Health Foundation – Multiple Chronic Conditions in Rhode Island, 2020*⁶⁰

Published by the United Health Foundation, the America's Health Rankings website displays a quick datasheet on *Multiple Chronic Conditions* in RI individuals. Data can be compared by state against US averages. For 2020, the site reports that 10.1% of RI individuals have three or more chronic conditions, compared to the national average of 9.1%. In addition, 19.3% of RI residents that have less than a high school degree report having chronic conditions, compared to 5.9% of college grads in the state.

HEALTH CARE QUALITY AND OUTCOMES

*United States Census Bureau – Advancing Equity with Data, 2015-2019*⁶¹

The United States Census Bureau's *Data for Equity* website assesses disparities and needs in various communities by offering data on public assistance programs, diversity measurement, data education, opportunity measurement, and more. The website's "Community Explorer" feature enables researchers to search data by state and county. The Census Bureau aggregates several data tools for this site including the American Community Survey (ACS), County Business Patterns (CBP), Nonemployee Statistics (NES), and Community Resilience Estimates (CRE). The CRE measures the level of risk for neighborhoods to the impacts of disaster. In Rhode Island, the CRE is 19.8%, compared to the national CRE of approximately 21.6%. Other facts about Rhode Islanders include:

- 344.7k have broadband service (84%)
- 106.5k have one or more disabilities (25.9%)
- 53.6k are below the poverty level (13.1%)
- 38.8k are without a vehicle (9.4%)

*City Health Dashboard – Providence, Warwick, Pawtucket, 2017-2020*⁶²

With support from the Robert Wood Johnson Foundation, the *City Health Dashboard* offers data on over 40 measures of health and drivers of health for the 500 largest US cities. This website also compares selected cities to averages across the country using the most current data available. The website compares data for three Rhode Island cities: Warwick, Pawtucket, and Providence. Of these cities, Providence shows the worst overall health, while Warwick shows the best. As for specific health outcomes:

- Lead is a significant health risk in both Providence and Pawtucket.
- Providence's third graders in public schools had an average reading test score of 1.6, compared to the national average of 3 (for 3rd grade level).
- Providence had 36.7 opioid overdose deaths per 100,000 population. Warwick had an average of 27.9 and Pawtucket had an average of 28.9. The stats in these three cities were all higher than the Dashboard's cities average of 15.
- The overall COVID Local Risk Index rank is high in both Providence and Pawtucket.

*The Commonwealth Fund 2022 Scorecard on State Health System Performance – Rhode Island, 2022*⁶³

The *Commonwealth Fund Scorecard on State Health System Performance* identifies where health care policies are on track as well as areas that need improvement. Using the Scorecard, states can compare how their performance stacks up against all others. According to the June 2022 edition, Rhode Island ranks 6th overall (of 51 states and territories), 25th on avoidable hospital use, 2nd on access and affordability, 6th on prevention and treatment, 22nd on income disparities, and 2nd on racial and ethnic equity. The state's bottom-ranked indicators were all related to COVID-19: days of hospital staffing shortages during the COVID-19 pandemic, days of high ICU stress during the COVID-19 pandemic, and deaths from COVID-19 in nursing homes. Top-ranked indicators include: high out-of-pocket medical spending, adults without a dental visit, and adults with all recommended cancer screenings. Notably, the indicators that worsened the most since the 2020 report include: adults with any mental illness reporting unmet need, children who did not receive needed mental health care, and preventable hospitalizations ages 18-64. Indicators that improved the most include diabetic adults without an annual hemoglobin A1c test, central line-associated blood stream infection (CLABSI), and potentially avoidable ED visits age 65 and older.

Behavioral Risk Factor Surveillance System – Rhode Island, 2020⁶⁴

The Behavioral Risk Factor Surveillance System (BRFSS) is the nation’s premier system of health-related telephone surveys that collect state data about US adult residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. The “Web Query System” can be used to compare different health areas, measures, and demographics to see where disparities exist. A partnership between the Centers for Disease Control and Prevention and each state’s department of health, the survey is conducted annually by phone to landlines and cell phones. In 2020, the most concerning change in Rhode Island was the increase in obesity from 26% to 30%. In addition, 63.2% of RI adults had at least one Adverse Childhood Experience (ACE). According to the website, poor general health is experienced most frequently by low-income individuals, people of color, those who identify as LGBTQ+, and uninsured individuals or residents with public insurance. The most encouraging changes in the population included getting exercise, having medical checkups, and smoking cigarettes.

United Health Foundation – Rhode Island Summary, 2021⁶⁵

Published by the United Health Foundation, the *America’s Health Rankings* database provides information on health statistics and behaviors for the US population in general, as well as state-to-state comparisons. Some challenges for the state include: a high percentage of housing with lead risk, high prevalence of high-risk HIV behaviors, and low volunteerism rate. The site also reported the following for Rhode Islanders:

- Chlamydia increased 31% from 2014 to 2019
- Adults who avoided care due to cost decreased by 31% between 2017 and 2020 (from 12% to 8.3%)
- Insufficient sleep decreased by 11% between 2018 and 2020 (from 36.5% to 32.5% of adults)

HealthFacts RI Public Reports⁶⁶

The *HealthFacts RI* database includes statistics on important healthcare payment information for individuals with health insurance but does not include information about uninsured residents. This site offers an interactive feature to compare differences in health services among patients with Medicare, Medicaid, and commercial insurance. The data aims to help healthcare providers and consumers improve healthcare use, quality, and spending. For the state’s 2020 fiscal year:

- Adolescent well-visit rates are 27.2% for those on Medicare, 46.9% for Medicaid, and 60% for private/commercial health plans
- 38% of individuals with Medicare Advantage plans have a significant chronic disease in multiple organs, compared to 9% of individuals with private/commercial plans
- Medicaid has a 20.2% 30-day hospital readmission rate, compared to 15.5% for Medicare and 9.2% for private plans
- 26.4% of Medicaid patients have a 7-day follow up after hospitalization for mental illness, compared to 24% of Medicare patients and 47.4% of private plan patients

County Health Rankings – 2022 Rhode Island State Report⁶⁷

The *County Health Rankings & Roadmaps* program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Their annual *County Health Rankings* provide a snapshot of how health is influenced by where people 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. For 2022, the report shows that the childcare cost burden among Rhode Island counties ranges from 19% to 27%, hovering around the national average of 25%. Bristol county is ranked #1 in health factors and outcomes.

Centers for Disease Control and Prevention – National Center for Health Statistics: Rhode Island⁶⁸

This statistics page on the Centers for Disease Control and Prevention website offers a brief overview of the basic health of Rhode Islanders. It details information about birth rates and types of birth. In Rhode Island, leading causes of death are listed as heart disease and cancer. Statewide birth data points from 2019 include:

- Cesarean delivery rate = 33.4% (ranked 14th nationally)
- Preterm birth rate = 9.1% (ranked 42nd nationally)
- Low birthweight rate = 7.7% (tied 30th nationally)

*Rhode Island Life Index 2021*⁶⁹

This report from the *Rhode Island Life Index* provides information on many health determinants. From April through July 2021, adult residents were randomly across the state of Rhode Island. The survey featured three sets of questions about respondents' perceptions of their communities and showed areas for improvement as well as where the state is doing well. Here are some key stats from the report:

- RI Life Index = 63
- Quality of the community: core city = 52, non-core city = 59
- Programs and services for children = 74
- Affordable and quality housing = 40
- Cost of living = 31
- Food security & Access to technology = 88

*Opportunity Index – Rhode Island*⁷⁰

The *Opportunity Index* is an annual report developed by Opportunity Nation, a campaign of the Forum for Youth Investment and Child Trends. The Index offers a quick database of information on how Rhode Island and other states score when it comes to opportunity. All data is also compared to national averages.

- R.I. state rank = 20
- R.I. opportunity score = 56.3 (national = 53.2)
- R.I. economic score = 57 (national = 57)
- R.I. education score = 54.8 (national = 56.1)
- R.I. unemployment rate = 3.8% (national = 3.3%)

*United Way of Rhode Island – 2020–2021 Community Impact Report*⁷¹

The United Way of Rhode Island's *Community Impact Report* provides a brief description of how money is being spent to advance communities and support equity throughout the state. According to the report, \$1.26 million was distributed to workforce development/basic needs; \$1.19 million to housing; and \$2.27 million to early childhood & youth development. For fiscal year 2021, the United Way of Rhode Island reported accomplishing an important victory by ending the discrimination by source of income in the rental market. During that year, 41% of the organization's resources were granted to Rhode Island nonprofits.

CHILDREN'S HEALTH

Rhode Island KIDS COUNT Factbook, 2022⁷²

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. Information is presented by city and town, in addition to an aggregate of the four core cities in which more than 25% of the children live in poverty. Those cities are Providence, Central Falls, Pawtucket, and Woonsocket. Of note, two of the four core cities are located in the TMH primary service area. This Factbook tracks the progress of 70 indicators across five areas of child wellbeing: Family and Community, Economic Well-Being, Health, Safety, and Education.

- 39% of children do not eat enough because food is unaffordable
- 6% of children have a parent with no health insurance
- 55% of adults ages 18-24 have felt down, depressed, or hopeless nearly every day in the past two weeks
- The workforce crisis affects access to many vital services for children, in large part due to inadequate reimbursements
- Rhode Island's Temporary Caregivers Insurance (TCI) program only provides up to 5 weeks of wage replacement benefits for mothers; though mothers who take about 12 weeks off have been found to have less depressive symptoms and better health
- 15% of Rhode Island children aged 2-17 are overweight and 20% are obese
- Rhode Island is one of 28 states that currently has no minimum age of jurisdiction for Family Court

Rhode Island Department of Health – Youth Risk Behavior Survey, 2019⁷³

The Youth Risk Behavior Survey is a collaboration among the CDC, RIDOH, Rhode Island Department of Education, and Rhode Island Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals. The survey is administered every two years to a sample of students at randomly selected Rhode Island high schools and middle schools. The survey asks questions in the domains of relationship skills, responsible behaviors, self-management, and school and home environment.

*Rhode Island Department of Health – Adolescent Sexual Health – 2020 Data Brief*⁷⁴

This *2020 Data Brief* from the State of Rhode Island Department of Health provides information about the sexual tendencies and health of adolescents in Rhode Island. The information can be used to attempt to increase sexual education and healthcare for the youth population. From 2017 to 2019, sexual activity among high school students increased from 26% to 32%. In addition, 55% of high school students reported condom use at last sexual intercourse, which represents a decrease from 61% in 2009. While pregnancy rates are decreasing, chlamydia cases are increasing.

*Evaluating Housing Characteristics Associated With Childhood Lead Exposure in Providence, Rhode Island*⁷⁵

The research done for the article, “Evaluating Housing Characteristics Associated With Childhood Lead Exposure in Providence, Rhode Island,” takes a comprehensive look at child, housing, and neighborhood characteristics of Providence children’s likelihood of having elevated blood lead levels. Children living in properties with landlords who owned four or more properties had lower odds of having elevated blood lead levels (BLLs). Houses built before 1950 are associated with increased odds of elevated BLLs.

*Primary Care for Transgender Adolescents and Young Adults in Rhode Island: An Analysis of the All Payers Claims Database*⁷⁶

This article, “Primary Care for Transgender Adolescents and Young Adults in Rhode Island: An Analysis of the “All Payers Claims Database,” was written for the purpose of finding disparities for transgender youths, whose health needs are often overlooked. Results were compared to those of cisgender adolescents. Findings showed no significant difference in the proportion of transgender and cisgender youths who received flu and HPV vaccines or physical exams. Transgender youths are more likely to receive regular cholesterol and BMI screenings. Overall, transgender adolescents accessing the healthcare system received similar, if not greater, levels of preventive health services compared to their cisgender peers.

MENTAL & BEHAVIORAL HEALTH

*Kaiser Family Foundation – Mental Health in Rhode Island, 2021*⁷⁷

This fact sheet on *Mental Health in Rhode Island* by the Kaiser Family Foundation offers an overview of mental health and substance use disorders in Rhode Island, including mental illness during the COVID-19 pandemic; the prevalence of common mental health and substance use disorders prior to the pandemic; and coverage and access issues. National level data are included whenever possible for comparison. Data from the 2021 state fact sheet for Rhode Island shows:

- 37.3% of adults in Rhode Island report having symptoms of anxiety or depression, compared to 31.6% of the US general population
- 59.1% of adults in Rhode Island with mild mental illness did not receive treatment, 45.7% of those with moderate illness did not, and 38.3% with severe illness did not
- Psychosocial Rehabilitation is not covered in fee-for-service Medicaid in Rhode Island.
- There are 37.5 drug overdose deaths per 100,000 people in Rhode Island, compared to a rate of 28.3 per 100,000 for the US

National Alliance on Mental Illness – Mental Health in Rhode Island⁷⁸

The National Alliance on Mental Illness produces this quick fact sheet about the basics of *Mental Health in Rhode Island*. Their goal is to highlight the pressing issue of the lack of accessible mental health care in each state.

- Individuals in Rhode Island are over four times more likely to be forced out-of-network for mental health care than for primary health care
- High school students with depression are more than two times more likely to drop out than their peers
- 1,104 people in Rhode Island are homeless and one in four residents live with serious mental illness
- Nationally, seven in 10 youths in the juvenile justice system have a mental health condition

Rhode Island 2020 Mental Health National Outcome Measures (NOMS): SAMHSA Uniform Reporting System

The Substance Abuse and Mental Health Services Administration produces this in-depth datasheet about the mental health of adults and children in Rhode Island. All Rhode Island data is compared to national data to see how Rhode Island is performing.

- 39.6% of Rhode Island children who meet the Federal definition for Serious Emotional Disturbances (SEDs) are served through State Mental Health Agencies (SMHAs) (national average = 71.1%);
- 5.6% of people served by SMHAs are homeless in Rhode Island;
- 88.4% of Rhode Island adults get admitted to a Coordinated Specialty Care-First Episode Psychosis (CSC-FEP) service during the year (national average = 62.7%)

Comparison of Characteristics of Deaths From Drug Overdose Before vs During the COVID-19 Pandemic in Rhode Island⁷⁹

This study was conducted to find how COVID-19 affected deaths from drug overdose. The article explains the study performed and the results found. The findings from the research are meant to address some of the issues caused by the pandemic and provide guidance for health professionals to work to solve these problems.

- During the pandemic, rates of death due to overdose during 2020 were higher among men, non-Hispanic White individuals, single individuals, deaths involving opioids, and deaths occurring in a personal residence
- There was a decrease in deaths from overdose involving heroine
- The rate of deaths from overdose in Rhode Island increased in the first 8 months of 2020 compared to 2019

Trust for America's Health – Pain in the Nation: The Epidemics of Alcohol, Drug, and Suicide Deaths⁸⁰

This report by the Trust for America's Health examines the set of epidemics the country is facing as drug overdose, alcohol-related, and suicide deaths are all increasing. The report includes evidence-based programs and policies to address these triple crises and is supported by a grant from the Well Being Trust. In 2020, 18 states had higher suicide death rates compared to 2019, and 47 states had higher drug-induced deaths. Every state had higher alcohol death rates. During COVID-19, 140,000 youth lost a caregiver with disparities by race and ethnicity. For instance, Black children were 2.4 times more likely to have lost a caregiver during COVID.

WOMEN'S HEALTH

United Health Foundation – 2021 Health of Women and Children Report⁸¹

The *2021 Health of Women and Children Report* provides health statistics and information on behaviors for women and children in the US in general, as well as in specific states. It highlights the most pressing facts, as well as each state's strengths and weaknesses. This site also compares data from state-to-state. For Rhode Island, the site shows:

- High prevalence of asthma among children
- High prevalence of excessive drinking among women
- High racial disparity among children in poverty
- Low birth weight increased 10% from 7.1% to 7.8% of live births between 2014 and 2019

*Statista – Percentage of Preterm Birth and Cesarean Delivery in Rhode Island in 2020*⁸²

Statista’s quick data page and graph on *Percentage of Preterm Birth and Cesarean Delivery in Rhode Island* displays information about preterm and cesarean births. In 2020, the number of births in Rhode Island amounted to 10,102. In the state, nearly one out of ten babies were delivered preterm in 2020.

- 33.4% of births in Rhode Island were by cesarean delivery
- 29.3% of births in Rhode Island were low risk cesarean delivery
- 9.06% of births in Rhode Island were preterm

*The Health and Socioeconomic Outcomes of Abortion Denial in Rhode Island: A Health Impact Assessment*⁸³

This research for this article, “The Health and Socioeconomic Outcomes of Abortion Denial in Rhode Island: A Health Impact Assessment,” was conducted to predict the possible outcomes of banning abortion in Rhode Island. Recent data was used to calculate the projected numbers of possible abortion cases and to show health professionals and policymakers the negative consequences of denying abortion. According to this article, if abortions were outlawed in Rhode Island, an estimated 41.4% of women turned away would report having anxiety and depression one-week post denial. Of the 2,372 expected to be denied each year, 1,499 would be on public assistance, 1,200 would have no insurance, 1,337 would be living in poverty, and 41 would have experienced physical violence.

ACCESS AND COVERAGE

*Health System Tracker – An Examination of Surprise Medical Bills and Proposals to Protect Consumers from Them*⁸⁴

Using data collected from 2017 to 2019, this article, “An Examination of Surprise Medical Bills and Proposals to Protect Consumers from Them,” from the Peterson-KFF Health System Tracker explains the issue of surprise medical issues. Although most of the data is generalized, some specific statistics are displayed for each state, such as:

- Rhode Island percent of ED visits with any out-of-network event = 16% (national average = 18%)
- Rhode Island percent of in-network admissions that result in at least one out-of-network charge = 8% (national average = 16%)
- 38% of the US population said they are “very worried” about paying for surprise medical bills, and 29% report they are “somewhat worried”

HPSA Find – Rhode Island⁸⁵

The *Health Professional Shortage Area (HPSA) Find* tool displays data on the geographic, population, and facility HPSA designations throughout the US. This database lives on the data.HRSA.gov website and is managed by the Health Resources & Services Administration (HRSA). Users can search by US state or county, comparing HPSA scores to see which areas are most in need of physicians. Scores are provided on a scale of 0-26 (the higher the score, the higher need the area has for clinicians). For primary care facilities, Providence city has a HPSA score of 12 and Pawtucket/Central Falls has an HPSA score of 11. For dental health, Providence city has a HPSA score of 19 and Pawtucket/Central Falls has a score of 17. Providence city's mental health score is 12.

Statista – Health Insurance Status Distribution of the Total Population of Rhode Island in 2020⁸⁶

Statista's quick data page and graph on *Health Insurance Status Distribution of the Total Population of Rhode Island in 2020* displays information on the number of Rhode Island individuals who have insurance coverage with various insurance plans. In 2020, the largest portion of Rhode Island's residents were insured through employers. Other data for Rhode Island residents in 2020 shows:

- 3.1% are Uninsured or have coverage under the Indian Health Service only
- 16.1% are covered by Medicare plans
- 18.7% are covered by Medicaid plans
- 5.2% purchased or are covered as a dependent by non-group insurance
- 54.7% have employer-sponsored coverage either through their own job or as a dependent in the same household

Open Data Network – Percent Without Health Insurance: Data for Rhode Island⁸⁷

This short datasheet offers a basic understanding of the numbers of residents with and without insurance in the state using data from 2008 through 2019. The statistics show that 21.2% of the uninsured in Rhode Island are at or below 138% of poverty, and 20.8% are at or below 200% of poverty. In addition, 25.7% of uninsured residents in Rhode Island are Hispanic, 12.7% are Black, and 7.1% are White.

SOCIAL DETERMINANTS OF HEALTH

*Environmental Health Burdens and Socioeconomic Status in Rhode Island: Using Geographic Information Systems to Examine Health Disparities in Medical School*⁸⁸

This article, “*Environmental Health Burdens and Socioeconomic Status in Rhode Island: Using Geographic Information Systems to Examine Health Disparities in Medical School*,” focuses on the environmental determinants of health to examine reasons behind current health disparities in Rhode Island and the US. On average, the worst-performing elementary schools, fast food restaurants, and Superfund sites in Rhode Island were more likely to be surrounded by poorer and less White neighborhoods. In contrast, the best performing elementary schools and community parks were more likely to be placed in affluent and predominantly White neighborhoods. These findings are consistent with the literature on the relationship between systemic discrimination and health disparities.

*Social Determinants of Health Data Drives Neighborhood Health Plan of Rhode Island to Add Companion Services to its Medicare-Medicaid Plan*⁸⁹

This press release was published by the Neighborhood Health Plan of Rhode Island (Neighborhood) on October 6, 2021. Referring to social determinants of health data, the release states that Neighborhood’s Medicare-Medicaid members are 2.34 times more likely to be at high risk for social isolation than other members in the organization’s Medicaid and commercial plans. The release goes on to announce a new program designed to improve disparities by offering access to visits from a qualified, trained companion for up to 120 hours per year. In addition, multilingual “Papa Pals” are available to help members with household chores, meal preparation, exercise and movement, and social activities at their homes. Neighborhood hopes these supplemental benefits can reduce barriers and improve members’ health and wellbeing.

*HousingWorksRI at Roger Williams University – 2021 Housing Fact Book*⁹⁰

HousingWorksRI at Roger Williams University is a clearinghouse of information about housing all over the state of Rhode Island. The group conducts research and analyzes data to inform public policy, develop communications strategies, and promote dialogue about the relationship between housing and the state’s economic future, as well as residents’ well-being. The *2021 Housing Fact Book* offers an in-depth discussion of many determinants of housing and includes data by town and region. Key findings include:

- In Rhode Island, White residents have a homeownership rate twice that of Black residents, and more than double the rate of Latino homeownership
- There has been a 5% increase in homeless youth enrolled in schools since 2018

- 32% of Latinos living in Rhode Island are overcrowded, although they make up only 15% of the population
- The annual income needed to affordably purchase a median-priced home in Providence (not including the East Side) = 69k, compared to 275k for New Shoreham (a town in Washington County, Rhode Island); the median household income in Rhode Island = 67k

RIDOH Health Equity Zones⁹¹

This report by the Rhode Island Department of Health (RIDOH) explains the importance of building health equity. The state's Health Equity Zones (HEZ) are geographic areas designed to achieve health equity by eliminating health disparities using place-based strategies to promote healthy communities. In April 2015, the RIDOH selected a first cohort of 11 HEZ (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 and evaluating those plans of action. The RIDOH expects hospitals and HEZ to partner on clinical-community linkages to improve population health at local levels. Their 2022 report provides updates on the actions taken by specific counties and towns in their respective HEZ, including:

- The Washington County HEZ has provided evidence-based mental health first aid and suicide prevention training to more than 1,000 police officers, clergy, teachers, parents, and other professionals, and has received federal funding to provide high-quality, timely, and evidence-based care to patients at risk for suicide.
- The West Warwick Health Equity Zone embedded a behavioral health clinician within the local police department to divert patients with substance misuse from the criminal justice system and into treatment.
- The Pawtucket and Central Falls Health Equity Zone partnered with the City of Central Falls Planning Department to develop Rhode Island's first Complete and Green Streets ordinance, which is designed to ensure safe access to roadways for users of all ages and abilities and to protect the environment.
- The Newport Health Equity Zone partnered with the Newport Open Space Partnership and under-served communities – to improve access to trees, parks, and recreation opportunities – in the Newport Tree, Parks and Open Space Master Plan.
- The City of Providence Health Equity Zone trained staff of 11 City recreation centers in implementing a Healthy Eating policy, to ensure healthy options and role modeling for City youth in all recreation centers.

- Health Equity Zones in Providence, Newport, West Warwick, Pawtucket, and Central Falls partnered to train and deploy trusted community members as community health workers to conduct needs assessments, identify safe routes to schools to improve attendance, promote recovery services, and build community-clinical linkages.

SENIOR HEALTH/LONG-TERM CARE

Healthy Data Aging Report – Highlights from Rhode Island, 2020⁹²

The full *2020 Rhode Island Healthy Aging Data Report* (available online at www.healthyagingdatareports.org) is an easy-to-use online resource created by researchers at the Gerontology Institute of the John W. McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston. Funded by the Tufts Health Plan Foundation, this report includes 197 indicators (up from 120 indicators in 2016) and provides a comprehensive picture of the health of older adults in Rhode Island. Forty-one community profiles are included — one for every city and town in the state, plus two neighborhoods in Providence — offering data to help inform policy, planning, and practice. Findings for 2020 include:

- 8.1% more of Rhode Island adults age 65+ have chronic kidney disease compared to 2016
- 21.3% of women 60+ eat 5 or more servings of fruit/vegetables per day, compared to 14.4% of men
- East Greenwich and North Kingstown have the best rates of physical activity (78.6%), while Central Falls has the worst (60.3%)
- Jamestown has the lowest rate of Hypertension (61.3%), while Johnston has the highest (83.3%)

AARP – Long-Term Services & Supports State Scorecard, 2020⁹³

This website displays the “*State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers*” for each US state. Rankings of different categories of care allow readers to compare local data to national data. The Scorecard ranks the states from highest to lowest performance on each indicator in five dimensions: Affordability and Access, Choice of Setting and Provider, Quality of Life and Quality of Care, and Effective Transitions. Rankings for Rhode Island against other states include:

- Support for caregivers = 10
- Affordability and access & quality of life/care = 37
- Percentage of Medicaid and state-funded Long-Term Services and Supports (LTSS) spending going to Home- and Community-Based Services (HCBS) for older people and adults with physical disabilities = 42
- Median annual home care private pay cost as a percentage of median household income ages 65+ = 48

OTHER

Responsibility.org – National Drunk Driving Statistics Map: Rhode Island, 2019⁹⁴

The *National Drunk Driving Statistics Map for Rhode Island* displays data on the fatalities in each state that are attributed to drunk driving incidents and compares them to national statistics. State laws about drunk driving are also included. For 2019, standout data points for Rhode Island include:

- 43.9% of total Rhode Island fatalities are alcohol-impaired driving fatalities (the national average was 28.1%)
- The 10-year change in alcohol-impaired driving fatalities per 100K population was -7.8% (compared to the national average of -5.7)
- 16.3% of Rhode Island individuals aged 12-20 reported binge drinking in the past 30-days (the national average was 11.2%)

V. Identification of The Miriam Hospital Community Significant Needs

The qualitative and quantitative data collected for this CHNA, as described in Section IV, was presented to the leadership of TMH, including the hospital President, Chief Medical Officer, Chief Nursing Officer, and leaders from finance and operations. The leadership team engaged in robust discussion of the findings and reflected on the hospital's prior experience, expertise, and current initiatives to reach consensus on which health concerns should be considered significant and their order of significance for the purpose of implementation planning.

Based on the review, evaluation, and discussion of the qualitative and quantitative data collected for this CHNA, six significant health needs have been identified for the community served by TMH. Below, TMH's prioritized significant health needs are described in further detail.

The prioritized, significant health needs resulting from the TMH 2022 CHNA process are:

Priority 1: Access to Healthcare Services

Priority 2: Chronic Disease Management

Priority 3: Mental and Behavioral Health Services for Patients and Caregivers

Priority 4: Grow and Diversify the Workforce

Priority 5: Community-based Access to Health Information

Priority 6: Navigation Supports in Hospital and Community Settings

1. Access to Healthcare Services

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. 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.⁹⁵

During the 2022 CHF's held for TMH, "Access to Care" was among the top five priorities identified by participants. "Access to Medical Services" was also selected as a health concern by 10% of survey respondents.

When asked to comment on the progress made in addressing TMH's 2019 priorities, a survey respondent offered:

“Access to care has gotten worse. It's really hard to get timely appointments and doctors' offices don't seem to understand that patients have jobs — and other doctor appointments — and cannot just come whenever.”

Commonly recognized barriers to care include:

- Transportation
- Lack of availability
- Out-of-pocket costs
- Language access
- Lack of insurance coverage⁹⁶

In the last RIDOH Statewide Health Inventory (2015), when asked to rank community health issues, most respondents reported that making health care more affordable (79.5%) and increasing access to health care (69.9%) were of extreme importance. 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. By 2021, the uninsured rate in Rhode Island dropped to 4.6%.⁹⁷

According to the 2022 Commonwealth Fund Scorecard on State Health System Performance, Rhode Island ranked #2 in the nation for affordability and accessibility based on overall performance and 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. In the same analysis, Rhode Island ranked in the bottom decile of states for low-income adults who had all recommended cancer screenings and low-income children without age-appropriate medical and dental preventive visits in the past year. Measures of access by race and ethnicity also revealed significant disparities. For example, the percentage of the Latinx/Hispanic adult population who were uninsured (ages 19-64), went without care because of cost in the past year, and who lacked a usual source of care were two to three times that of the White population.⁹⁸ In the judgement of one of the health care leaders interviewed as part of the CHNA, the solution to fighting most disparities involves access in some form, and often access to a primary care network. To close gaps in disparities, one must promote access for everyone in the community either by removing barriers to primary care, increasing access to alternative levels of care, or establishing partnerships with community-based stakeholders who can improve models of care.

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.”⁹⁹ 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.

Increasing access to primary care can improve long-term population health outcomes and health equity. 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.¹⁰⁰

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. There are nine primary care HPSAs, eight dental care HPSAs, and seven mental health HPSAs in Providence County, suggesting significant challenges with access to care.¹⁰¹

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) identify geographic areas and specific population subsets that lack of access to primary care services. 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. Providence County has five MUAs with IMU scores ranging from 54.2 – 61.9.

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 is required to compete regionally and nationally for providers. Nationally, there is a current and projected shortage of PCPs. This shortage is expected to grow as the population ages and the corresponding need for services grows.¹⁰²

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.¹⁰³ 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 advanced practice providers- 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%.¹⁰⁴ TMH consistently monitors its provider workforce and utilizes advanced practitioners like NPs and PAs to augment the primary care workforce. In addition, unlike some community-based PCPs, TMH PCPs accept Medicaid, increasing access to care for some of the most vulnerable residents.

Linkage with a PCP can help reduce the number of ED 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.¹⁰⁵ In Providence County, the rate for ambulatory sensitive conditions was 4,003 per 100,000 Medicare beneficiaries, significantly higher than the State of Rhode Island at 3,797 per 100,000 and top U.S. performers at 2,233 per 100,000.¹⁰⁶ As one key informant noted- fighting disparities requires addressing access to services, and improving access to primary care, urgent care, and models of care that optimize community partnerships can reduce emergency department utilization. Key informants also cited the opportunity to sustain advances in telemedicine that were achieved during the pandemic as a means of improving access to primary, specialty, and mental health care.

2. Chronic Disease Management

In 2020, one in ten Rhode Islanders were found to have three or more chronic conditions, compared to the national average of 9.1%.¹⁰⁷ During this needs assessment, 65% of TMH survey respondents selected “Chronic Disease Management” as a health concern. In addition, 40% of survey respondents chose “Chronic Disease Prevention” as a priority. Chronic conditions can lead to higher levels of hospital utilization, particularly if not managed properly. According to the RIDOH, patients with congestive heart failure are thirteen times more likely to be admitted to the hospital than the overall population, and those with Chronic Obstructive Pulmonary Disease (COPD) are readmitted, on average, 7.5 times more than the overall population.¹⁰⁸

Cardiovascular disease, including heart disease and stroke, is the leading cause of death and disability in Rhode Island and the country. In 2021, 8.0% of Rhode Islanders reported being diagnosed with a cardiovascular disease. One in three (33.0%) had hypertension or high cholesterol (32.5%). In the same analysis, 10.3% Rhode Islanders reported a diagnosis of diabetes.¹⁰⁹ During the COVID-19 outbreak, diabetes was identified as an underlying condition that increases the chance of contracting a severe illness. Although diabetes incidence has decreased nationally since 2018, diabetes and prediabetes prevalence have increased. Citizens who identify as American Indian or Alaskan Native, non-Hispanic Black, Hispanic, and/or non-Hispanic Asian are more likely to be diagnosed with diabetes than non-Hispanic or White people.¹¹⁰ As a result of indicators like these, reducing chronic illness is one of the RIDOH's population health goals.¹¹¹

Risk of heart disease and diabetes can be reduced by taking steps to control factors:

- Control of blood pressure
- Lowering of cholesterol
- Prevention of smoking
- Adequate amounts of exercise¹¹²

In general, treatment for heart disease usually includes lifestyle changes such as eating a low fat, low cholesterol diet and exercising regularly. Other treatments include taking medications to control heart disease and related symptoms or undergoing medical procedures or surgery.¹¹³

While heart disease is the leading cause of death in Rhode Island, cancer is the second leading cause of death.¹¹⁴ Rhode Island ranks 35th in the nation for its rate of new cancers (456.8 per 100,000 population).¹¹⁵ The cancers with the highest incidence in Rhode Island are female breast cancer and prostate cancer. The cancer with the highest mortality in Rhode Island is lung and bronchus¹¹⁶, yet disparities across cancer sites reveal opportunities for improvement in screening, detection and treatment. For example, Black women have a 12% higher overall cancer death rate than their White counterparts.¹¹⁷

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.¹¹⁸ The Skin Check program operated by the LCHI and its partners provides free skin cancer screening at local beaches, parks, and worksites.

Through the LCI, TMH offers a robust cancer program with a range of specialists and programs for prevention, screening, treatment, and survivorship. TMH will continue to strengthen disease site expertise through the recruitment and retention of providers. TMH will also continue to offer education and community-building focused on cancer topics and place increased attention on reaching minority and disparately impacted populations. To augment support for its existing and new cancer patients, TMH will continue to offer navigator services and grow its navigator and peer support services.

A healthful diet reduces the risk of many chronic health conditions, including overweight and obesity, heart disease, high blood pressure, Type II diabetes, and some cancers. Unfortunately, obesity has been climbing in Rhode Island, just as it has across the nation. In 2021, Rhode Island was ranked 15th in the nation for adult obesity with 31.0% of Rhode Island adults obese, up from 27% in 2013.¹¹⁹ Overweight and obesity among children has also been climbing, with 34% of children ages 10-17 overweight or obese, ranking Rhode Island 35th in the country.¹²⁰

Reducing morbidity and mortality from weight and diet-related illness can be achieved by communities, health care systems, and governments working together to develop policies and programs that impact schools, the workplace, neighborhoods, and health care.¹²¹ Improving nutrition and weight requires a multi-sector solution and TMH is committed to investing in prevention, education, and expansion of clinical and non-clinical services to Rhode Island children and families to improve nutrition and healthy-weight as well as decreasing the impact of diet-related disease.

Nutrition and physical activity can help control risk factors for cardiovascular disease and other comorbidities. TMH is committed to expanding access to programs that promote cardiac health through prevention such as screening initiatives, free education and awareness programs, and community activities. TMH will collaborate with LCHI and RIH – which is nationally known for its weight management and preventative services, to improve access to these programs in the Rhode Island community.

3. Mental and Behavioral Health Services for Patients and Caregivers

During the 2022 CHNA for TMH, CHF participants repeatedly cited emotional wellbeing and mental and behavioral health among their top health concerns. Participants stated a desire to understand signs and symptoms of poor mental health for themselves and the people they care for (e.g., children, seniors). Amplifying the voices of community participants, most of the key informants representing health policy, health care, and social service stakeholders also named behavioral health care as a top concern, and further still, emphasized the need to improve behavioral health care services for children.

Among the TMH survey responses, “Substance Use Disorders” was chosen as a health concern by 20% of respondents, and “Mental and Behavioral Health” was selected by 15%. In addition, “Mental and Behavioral Health for the Family” was listed as a priority during TMH’s 2022 community forums.

When asked to comment on the progress made in addressing TMH’s priorities from 2019, CHF participants responded:

“I believe everyone's top priority should be substance use/addiction and mental health services.”

“Mental health remains a concern, especially now with a growing population of people on the autism spectrum who are also experiencing mental health challenges.”

Sufficient services to address behavioral health have also been identified as a leading health concern and priority by the RIDOH. One of Rhode Island’s twenty-three population health goals is to promote behavioral health and wellness among all Rhode Islanders.¹²²

Providence County adult residents reported an average of 4.8 mentally unhealthy days in past 30 days – the highest in Rhode Island. Further, 16% of Providence County adults reported experiencing frequent mental distress, measured as 14 or more days of poor mental health per month.¹²³ Statewide, 37.3% of adults in Rhode Island report having symptoms of anxiety or depression, compared to 31.6% of the US general population.¹²⁴

While TMH does not have a pediatrics department, it is important to consider the health of children in the service area, for whom untreated health risks will grow with them into adulthood. Notably, nearly one in three (32.3%) high school youth in Rhode Island reported feeling sad or hopeless almost every day for at least two weeks in a row such that they stopped doing some usual activities during the 12 months before being surveyed. Alarming, the rate among high school girls was 40.6%, significantly higher than boys at 23.9%. Among middle school students, 25.8% students reported feeling sad or hopeless for at least two weeks, and again, the rate was significantly higher for females (34.2%) than males (17.5%).¹²⁵

Access to mental and behavioral health services have not kept pace with the need in the population. There are 12 Mental Health Professional Shortage Areas in Rhode Island, with seven of those in Providence County.¹²⁶ In 2021, the Kaiser Family Foundation reported that 37.3% of adults in Rhode Island reported having symptoms of anxiety or depression, compared to 31.6% in the United States general population. Of concern, 59.1% of adults in Rhode Island with mild mental illness did not receive treatment, 45.7% of those with moderate illness did not, and 38.3% with severe illness did not receive treatment.¹²⁷

According to the 2022 Commonwealth Fund State Scorecard, the number of children in Rhode Island who did not receive needed mental health care worsened to 21%, more than the United States average (19%) and more than double the rate in the best performing state (10%).¹²⁸

Poor mental health coupled with inadequate access to mental health services can lead to increased rates of risk-taking behavior, suicide, and death. The United States is experiencing a triple epidemic of increasing deaths attributable to alcohol, drugs and suicide that have only been exacerbated by the COVID pandemic.¹²⁹

- 16.8% adults reported binge drinking or heavy drinking in the past 30 days, in 2020.¹³⁰
- 10.7% high school students reported binge drinking at least once during the previous 30 days.¹³¹
- After several years of decline between 2016 to 2019, Rhode Island saw its number of fatal, accidental drug overdoses jump 25% to 384 in 2020, and then climb another 14% to 436 in 2021.¹³²
- The CDC reported 94 deaths by suicide in Rhode Island in 2020.¹³³
- In 2019, 17% middle school students had ever seriously considered suicide with 6% attempting suicide. At the high school level, 13% students had seriously considered suicide in the past year with an alarming 15% attempting suicide in the previous 12 months.¹³⁴

Adverse Childhood Experiences (ACEs) are stressful or traumatic events in childhood that can undermine a child's sense of safety and well-being. Research shows that the toxic stress that results from ACEs not only impacts the health of children, but has long lasting effects into adulthood as well, negatively influencing factors such as employment, mental health, chronic disease, substance use, and other aspects of health – all contributors to deaths of despair. An analysis of data from the 2020 Rhode Island Behavioral Risk Factor Surveillance System revealed that 16.1% adults had 4 or more ACEs. The most common ACEs were emotional abuse (34.7%), having divorced or separated parents (30.7%), household substance use (26.1%), and physical abuse (24.7%). Individuals with 4+ ACEs had more than seven times the odds of having a depression diagnosis and six times the odds of experiencing frequent mental distress compared to those with no ACEs.¹³⁵

People with a mental health diagnosis 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 reported using illicit drugs in the past year was higher among those with a Major Depressive Episode (29.3%) than those without (14.3%).¹³⁶ 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.

If current trends continue, “deaths of despair” from drugs, alcohol, and suicide could kill an estimated 1.6 million Americans between 2016 and 2025, 60% more than the previous decade. More recent trend data suggest that the death rate could even double to 2 million people by 2025. Underlying causes of these deaths are attributed to pain, despair, disconnection, early childhood trauma, lack of economic opportunity, and poor working conditions- factors that worsened during the extended COVID-19 pandemic. The opposite causal pathway is also true- substance misuse and poor mental health can adversely impact health and well-being, academic and career attainment, interpersonal relationships, and community connectedness.¹³⁷

Each city and town in Rhode Island have experienced a death due to overdose. There are 37.5 drug overdose deaths per 100,000 people in Rhode Island, compared to a rate of 28.3 per 100,000 for the US.¹³⁸ While initially driven by misuse of prescription drugs, 65% (282) of overdose deaths in Rhode Island in 2021 were attributed to illicit drugs such as fentanyl and heroin, as well as fentanyl-laced drugs.¹³⁹

The prevention of overdose is a priority in Rhode Island, as evidenced by the work of the Governor’s Overdose Prevention and Intervention Task Force, a centralized coalition spanning the public and private sectors, across health and social service disciplines. The primary goal of the task force is to reduce the number of overdose deaths in Rhode Island. To achieve that goal, objectives and strategies have been established for treatment, rescue, prevention, and recovery. Among the strategies pursued is increasing access to medication-assisted treatment and behavioral health services, utilizing hospitals as an access point.

TMH clinicians participate on the Governor’s Overdose Prevention and Intervention Task and a Lifespan representative is the appointed chair of the state’s Opioid Settlement Advisory Committee. Leveraging the expertise at TMH and across the Lifespan system should be beneficial in responding to the need in the TMH service area and across the state. Having established the nation’s first Center of Biomedical Research Excellence on Opioids and Overdose, Lifespan affiliate, RIH expects to offer innovative research and practical applications of interdisciplinary responses to the opioid epidemic.

As the stigma associated with behavioral health treatment declines, patient volume is expected to increase. Significant statewide efforts are afoot to address behavioral health and substance use disorders in Rhode Island, with disease rates above the national average. Thoughtful, integrated approach 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.

4. Grow and Diversify the Workforce

TMH identified growing and diversifying the workforce as a strategy that will contribute to multiple health concerns, especially improving access to healthcare and navigation supports in hospital and community settings. By growing the workforce, TMH will increase the likelihood that patients will receive timely primary, specialty, and behavioral health care. Diversifying the workforce increases the likelihood that patients will receive care from someone who shares their culture, language, and lived experience, which in turn helps to dismantle communication and access barriers between patients and health care providers.

There is a growing body of literature that demonstrates that workforce diversity can help organizations improve patient care quality. A meta-analysis by Gomez and **Bernet** found positive associations between diversity, quality, and financial performance. Healthcare studies showed patients generally fare better when care was provided by more diverse teams. Professional skills-focused studies generally find improvements to innovation, team communications and improved risk assessment. Financial performance also improved with increased diversity.¹⁴⁰

As the largest employer in Rhode Island, Lifespan's workforce reflects the state, and while there is great diversity among staff in entry level positions, the degree of diversity diminishes with increasing levels of management/leadership. With shared values of compassion, accountability, respect, and excellence, TMH wants patients to experience teamwork that consistently serves and cares for them and their families, allowing patients to feel heard, respected, and safe as TMH supports their physical and emotional health.

5. Community-Based Access to Health Information

During TMH's 2022 community forums, participants expressed a desire for "Easily accessible, community-based health information." Twenty percent of survey respondents noted "Community-Based Education" as a health concern. In addition, 40% of respondents requested "More health education at medical visits" as one way that TMH could respond to their concerns, and 35% chose "More health education in community settings" as another.

The need for increased outreach and education is also identified in the RIDOH Strategic Framework with two of the five strategies addressing this in some form:¹⁴¹

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

Three of Rhode Island's twenty-three population health goals focused, at least partially, on the need for Outreach and Education:¹⁴²

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

Patients need information they can understand and use to effectively 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 and manage health challenges, 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)¹⁴³ 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 Rhode Island population), are impacted more acutely; and
- Improving health literacy at an early age has a direct impact on health literacy in later life.

CHF participants encouraged TMH to develop outreach programs and deliver them in neighborhood settings across the service area. The outreach programs should promote strategies to improve personal health and wellbeing with a specific focus on adopting behaviors to prevent health problems from developing later in life. In response, TMH can partner with other community-based providers who are actively engaged in the community to create impactful outreach and education programs.

TMH will continue to offer a wide array of educational, health literacy, and community outreach programs in multiple languages and formats, and in partnership with schools, employers, churches, and community-based non-profits. At the same time, TMH will continue to raise awareness about the programs it offers through targeted marketing and promotion so that a broader swath of the community may benefit from these programs.

6. Navigation Supports in Hospital and Community Settings

When asked what hospitals could do in response to their health concerns, 20% of survey respondents chose “More Health System Navigators.” CHF participants requested that the hospital hire a “customer service medical person to assist with acute situations” and offer “peer support.” Key informants also named access to community-based services and equitable care as goals and suggested that assistance navigating the health care system was a prime opportunity for hospitals to address population health concerns.

One strategy to help patients navigate hospital and community workforces is to grow the Community Health Worker (CHW) workforce. A CHW is “a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy.”¹⁴⁴ Specifically, the role of the community health worker is to:

- Operate in a supportive role within an interdisciplinary health care team utilizing an integrated care and treatment model.
- Provide peer outreach, case management and navigational services to members of the community who may not be cared for by traditional medical institutions.
- Collaborate with the medical home- primary care, behavioral health, and social work providers, to deliver interventions that will maximize patient health outcomes.

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.¹⁴⁵ Further investments in CHWs is a promising strategy to assist patients by linking clinical and community supports and at the same time build out career pathways for residents who reflect the diversity in the service area.

A workforce to help patients navigate hospital and community services will also benefit from technology to facilitate service referrals. Lifespan contracts with “Unite Us” to send referrals for SDOH services that are key to addressing health equity. The “Unite Us” platform allows the care team to proactively screen for unmet needs, facilitate access to providers across health and social settings, track referral and outcome data to identify trends in SDOH needs, expand access to community-based resources, and analyze data to identify disparities and inequities among the service population. Lifespan has been core to Unite Rhode Island’s success, serving as a leading referral sender and receiver for the community. Since the launch of Lifespan users in the fall of 2021, users have already sent over 1,000 referrals and have

worked with over 850 clients. Through continued use, TMH can expect to better understand inequities across gender, race, ethnicity, age, and other socio-demographic fields; gain visibility into trends impacting various populations, such as common service needs, service resolution, and service outcomes; and make informed decisions and take action to better serve clients and reduce disparities in access to care and health outcomes.

With a diverse resident population in which almost half (49.9%) of Providence residents and 31.6% Providence County residents speak a language other than English at home,¹⁴⁶ TMH has long recognized the need to provide language access supports to patients to facilitate their access to services. TMH currently employs 14 full time equivalent interpreters, utilizes 18 video remote interpreting devices, and contracts with local vendors to provide additional in-person interpretation for less frequently spoken languages, totaling more than 50,000 interpretation encounters in FY '22, through July.

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 executive management and other individuals critical to the organizational planning process will craft TMH's implementation strategy which will detail action item plans covering the period from October 1, 2022 through September 30, 2025. This implementation strategy will be completed and authorized by the TMH Board of Directors consistent with IRS rules and regulations.

A. Acknowledgements

Data and Information Contributors

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Appendix A: The Miriam Hospital Community Health Forum Schedule

Tuesday, May 10, 2022

1:00 – 2:30 PM

Online forum – Held via Zoom

Saturday, May 14, 2022

9:30 – 11:00 AM

Online forum – Held via Zoom

Appendix B: The Miriam Hospital CHNA Community Liaison Profiles

Michelle Lopez has been working as a Community Health Worker throughout the state of Rhode Island since 2015. Her past jobs have enabled her to service and connect with many people in the state that she loves. Michelle is very proud of and passionate about being first generation Guatemalan-American who was born and raised in Rhode Island. She was drawn to the Community Liaison role as she believes this information and experience will bring about positive changes for various communities she loves and serves. She feels that serving as a community liaison for Miriam Hospital will help her gain experience but most importantly, enable her to assist in her love to help others.

Ramona Santos Torres is a parent and community organizer with over 11 years of experience engaging and supporting families around education advocacy. In 2018, Ramona joined with two other parents and co-founded Parents Leading for Educational Equity (PLEE), a grassroots family advocacy organization whose mission is to uplift the voices of families of color in all decision-making spaces and to co-create the education system that their children deserve. One of Ramona's mantras is "Nothing About Us, Without Us" because she firmly believes in centering the voices of those most affected by and closest to the issues and systems that impact communities. Ramona is excited to be able to engage with families and community members during the Miriam Hospital Community Forums.

Appendix C: The Miriam Hospital CHNA 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 2022. 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
Lifespan. Delivering health with care.®

THE MIRIAM HOSPITAL - 2022 COMMUNITY HEALTH NEEDS ASSESSMENT

Community Forum Agenda

Saturday, May 14, 2022

- 9:30 AM Welcome & Introductions**
- 9:35 AM Overview of CHNA and progress since 2019**
- 9:45 AM Current Health Data**
- 9:55 AM Question #1: Does this reflect your health concerns? What's missing?**
- 10:15 AM Question #2: How would you prioritize among these health concerns?**
- 10:35 AM Question #3: What would you like for the hospital to do to help address these priorities?**
- 10:55 AM Wrap-Up & Evaluation**

Appendix E: The Miriam Hospital CHNA Community Input Form



2022 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. This survey should take 5 minutes or less to complete. We value your input!

1. What are your health concerns? You may choose more than one.
 - Access to Medical Services
 - Access to Health Information
 - Cancer
 - Heart Health
 - Healthy Weight & Nutrition
 - Children's Health
 - Mental and Behavioral Health
 - Senior Health
 - Substance Use Disorders
 - Community-based Education
 - Chronic Disease Management
 - Chronic Disease Prevention
 - Social Determinants of Health (e.g. housing, food access, education)
 - Other _____
2. What could our hospitals do in response to your concerns? You may choose more than one.
 - More health education at medical visits
 - More health education in community settings
 - More health system navigators
 - Improve language access
 - Easier access to medical appointments
 - Offer more locations for service
 - Help patients access services to address housing, employment, food security, etc.
 - Other _____
3. Please comment on the progress made in addressing the 2019 priorities (details on reverse).
4. To which hospital service area should these comments be attributed? Choose one or more.
 - Emma Pendleton Bradley Hospital
 - Newport Hospital
 - Rhode Island Hospital / Hasbro Children's Hospital
 - The Miriam Hospital
5. Any additional comments or suggestions?

The remaining questions are optional and we greatly appreciate you taking the time to respond. Answering these questions will help us determine to what degree the survey respondents reflect the diversity of residents in our service area.

6. What is your zip code? _____

7. How do you identify?

- Gender: Male Female Other
Race: American Indian/Alaska Native Asian Black/African American
 Native Hawaiian or Other Pacific Islander White
Ethnicity: Hispanic/Latinx Not Hispanic/Latinx
Age Range: 0-18 years 19-34 years 35-64 years 65+ years

8. Do you manage health care access for any children under the age of 18? Yes No

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

Name: _____

Email: _____ Telephone: _____

Please visit Lifespan's [Community Health Reports](#) page to learn more about the 2019 CHNAs. **Thank you!**

2019 Community Health Needs Assessment

The Patient Protection and Affordable Care Act ("Affordable Care Act") requires non-profit hospitals to conduct a Community Health Needs Assessment (CHNA) every three years. In 2019, Lifespan completed its third CHNA for each of its hospitals. CHNAs solicit feedback from members of the community to determine the most pressing health needs in the community served by the hospital. Based on the needs identified, each hospital develops implementation strategies that respond to the prioritized needs. That implementation plan describes the action steps that each hospital will take to mitigate the stated need over the 2020 to 2022 fiscal years. Please refer to the reports for detailed implementation strategies.

The 2019 CHNA for each hospital identified the following significant needs:

The Miriam Hospital

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

Newport Hospital

1. Access to Primary Care and Specialty Services
2. Outreach and Education
3. Access to Mental and Behavioral Health Services
4. Wellness Programs
5. Aging in Place

Rhode Island Hospital

1. Access to Care
2. Mental and Behavioral Health
3. Community-based Outreach and Education
4. Disease Management

Bradley Hospital

1. Access to Services
2. Systems of Care
3. Outreach and Education
4. Substance Abuse Prevention

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

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