NOTE: Approved and adopted by the Johnson Memorial Hospital Board of Directors June 29, 2016.
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Executive Summary

Johnson Memorial Hospital conducted a Community Health Needs Assessment for its service area, targeting the Connecticut towns of East Windsor, Ellington, Enfield, Somers, Stafford/Union, Suffield, Tolland, Willington, Windsor and Windsor Locks and the Massachusetts towns of East Longmeadow, Hampden, Longmeadow, Monson, and Wilbraham.

The purpose of the assessment was to gather information about perceived health needs from the citizens and health care providers of this area.

Over the last year, the assessment consisted of a series of interviews with local providers, a community phone survey and information gathered from local health departments, community-based organizations and focus groups.

Health needs identified through this process include: asthma, behavioral health, cardiovascular disease, diabetes, obesity, and substance abuse. A Strategic Plan for Community Transformation is being designed to address those needs with activities that align with Johnson Memorial Hospital’s mission, vision and values. With the guidance of the Trinity Health New England partners, the Corporate Strategic Planning Team and identified community partners, the goals, objectives and outcome measures identified for the Strategic Plan will be reviewed annually for the positive impact and improvement of the perceived health needs of the community.

Introduction

In recent years, the world of healthcare has undergone tremendous upheaval; old norms have imploded and new expectations have taken hold. Yet, more than a century after its birth, Johnson Memorial Hospital remains steadfast in its mission: to serve in the spirit of the Gospel as a compassionate and transforming healing presence in the community.

Johnson Memorial Hospital is committed to improving and enriching the lives of individuals and families in north central Connecticut and western Massachusetts; through readily accessible emergency care, lifespan health care services, and prevention-orientated education in a warm, caring environment.

The Community Health Needs Assessment (CHNA) is the first step in a process designated to better understand community needs by engaging healthcare providers, community leaders and community members in a conversation about how to improve health and wellbeing. We are excited to share what we have learned and to find ways to collaborate on solutions. The exchanges that took place during the implementation of the CHNA point to readiness for the collaboration across disciplines and in ways that respect community input. New ideas about the role of hospitals and healthcare systems in supporting community development are beginning to take hold, and Johnson Memorial Hospital is ready to embrace a leading role in north central Connecticut and western Massachusetts. Becoming part of Trinity Health has brought to the table significant expertise in this area. We look
forward to the next steps in the process of developing a strategic plan for community health and wellbeing designed to address the needs identified within this document.

**A Mission with Staying Power**

**Mission**

We, Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.

**Our Core Values**

*Reverence*

We honor the sacredness and dignity of every person.

*Commitment to Those Who are Poor*

We stand with and serve those who are poor, especially those most vulnerable.

*Justice*

We foster right relationships to promote the common good, including sustainability of Earth.

*Stewardship*

We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.

*Integrity*

We are faithful to who we say we are.

**More Than a Century of Caring**

Johnson Memorial Hospital is a 92-bed hospital located in Stafford Springs Connecticut that has been an anchor institution in north central Connecticut for 104 years. The Hospital moved from its original location on East Street in Stafford Springs to its present location on Chestnut Hill Road in 1975. During the 1980s, few health care organizations throughout the United States were branching out by creating subsidiaries, and Johnson Memorial Medical Center (JMMC) - known then as Johnson Memorial Corporation - was one of the first to bring this type of business structure to Connecticut. Early in the decade, Johnson Health Care, Johnson Development Fund and Wellcare joined Johnson Memorial Hospital under the Johnson Memorial Corporation umbrella. Soon after, the organization opened Connecticut's first free-standing, hospital-affiliated outpatient surgery center, Johnson Surgery Center. In the intervening years, Johnson has continued expanding services to meet the community's needs. In September 2010, JMMC emerged from Chapter 11 as an independent, community-based health care provider as it had been for nearly a century. In July of 2012, JMMC and Saint Francis Care signed an Affiliation Agreement, resulting in a mutually beneficial relationship that has provided the community with a sustainable, high quality
healthcare resource. As a result, JMMC has experienced improved operations by all measures of financial performance.

In 2016, Johnson Memorial Hospital and the other Johnson entities became part of Trinity Health - New England, an integrated health care delivery system that is a member of Trinity Health, Livonia, MI, one of the largest multi-institutional Catholic health care delivery systems in the nation. Today, Johnson Memorial Hospital, Johnson Health Care and Home & Community Health Services provide a continuum of health care services to those living and working in north central Connecticut and western Massachusetts.

While Johnson Memorial Hospital strives to honor the legacy of the Hospital’s founders, Cyril and Julia C. Johnson, through its mission of compassionate care, the hospital is hardly focused on the past. Johnson Memorial Hospital is continually looking ahead to anticipate better ways to deliver care in a rapidly changing environment. The result is a patient-centered model of care designed to produce a patient experience of the highest measureable quality for the communities the hospital serves. The resources and benefits available to Johnson Memorial Hospital as a result of the acquisition have positioned the hospital to respond nimbly to the changes in health care that the future will inevitably bring.

The CHNA: A Metric and a Mission

The federal Patient Protection and Affordable Care Act, passed into law in 2010, requires hospitals to conduct a CHNA – a periodic evaluation of the health needs of the community they serve. The CHNA may be a modern-day metric, but it fits easily into Johnson Memorial Hospital’s ongoing efforts to be a center of healing for its local and regional communities.

Johnson Memorial Hospital published its first federal mandated CHNA in 2013. The 2016 assessment will serve as a starting point for data-based goals and strategies on how to address the needs that have been identified. The health needs acknowledged by the CHNA will be integrated into a three-year community outreach plan and implementation strategy to combat the issues. By utilizing existing resources, strengthening partnerships and creating innovative programs on both the hospital campus and within the community, Johnson Memorial Hospital hopes to make a positive impact on these identified needs.

Report on Progress Since 2013 CHNA

In 2013, the top health concerns conveyed by the survey interviewees of the Johnson Memorial Hospital service area included obesity, diabetes, behavioral health, substance abuse (including alcoholism and tobacco use) and heart failure. The health needs acknowledged by the 2013 Community Health Needs Assessment were integrated into a three-year community outreach plan. After reviewing current community collaborations and partnerships, and internal resources, Johnson Memorial Hospital identified its strengths and weaknesses for the four prioritized health needs. The difficult economic climate for all Hospitals in the state of Connecticut, but especially smaller community Hospitals, was an obstacle that Johnson Memorial Hospital had to overcome in order to provide the desired outcomes. Because of these challenges Johnson Memorial Hospital relied on the Medical Staff and other health care professionals in the Johnson Memorial Medical Center health system to put an emphasis on community outreach education and screenings. Fortunately,
that request was met with great excitement and Johnson Memorial Hospital was able to increase the number of educational programs and screenings it provided. This led to an increase in programs centered on obesity and behavioral health (Weight Loss Programs, Healthy Eating Programs, Depression Programs and monthly Grief Groups, etc) and the creation of a monthly diabetic support group. Johnson also worked with community partners by offering space in the Community Medical Education Center on the Stafford Springs campus to groups such as the American Red Cross, Nar-Anon, TOPS (Take off Pounds Sensibly), and local churches to increase the availability of health and wellbeing services to the community.

During the past three years, Johnson Memorial Hospital worked closely with St. Francis Hospital and Medical Center to build up its community outreach presence in the community. The two hospitals’ worked as partners and leveraged existing resources to coordinate community outreach initiatives in an effective and efficient way. For example, the two hospitals jointly attended numerous health fairs and free public screening events. By working together, the hospitals were able to avoid duplicate efforts and strengthen their presence in the Johnson Memorial Hospital service area.

The affiliation also gave Johnson Memorial Hospital access to Saint Francis Medical Office buildings, the Saint Francis call center, and increased marketing opportunities for educational programs. Johnson Memorial Hospital is now able to offer programs more frequently and to a wider audience due to the availability of the Medical Offices in Enfield, Manchester and Glastonbury. The Saint Francis Call Center gives Johnson Memorial Hospital the ability to track who attends outreach programs allowing Johnson to identify what populations are and are not being reached. Finally, Johnson Memorial Hospital’s community outreach programs are now included in the Saint Francis BestCare magazine, on its website, in advertisements and other marketing materials.

Overview of Hospital Service Area and Facilities

Service Area

The Johnson Memorial Hospital service area covers 15 U.S. Census zip code tabulation areas. The primary service area of Johnson Memorial Hospital encompasses ten zip codes, which relate to the towns of East Windsor, Ellington, Enfield, Somers, Stafford/Union, Suffield, Tolland, Willington, Windsor and Windsor Locks. These Connecticut towns are located in Tolland and Hartford Counties.

Johnson Memorial Hospital’s secondary service area consists of five towns in Massachusetts, all of which fall under Hampden County. These towns are: East Longmeadow, Hampden, Longmeadow, Monson, and Wilbraham.
Population

The combined population for these communities is roughly 222,746 residents. The population is mostly white (83%), followed by Black/African American (8%), Hispanic/Latino (5%), and Asian (3%). This makes the Johnson service area less diverse than the state as a whole (CT Total 70% white). That being said, the service area meets state averages for age and gender demographics. 21% of the Johnson service area is younger than 18 years old and 15% is over 64 years of age. The state total is 22% and 15% respectively. The Johnson service area population has an even 50-50 split in terms of gender, which is almost identical to the state total of 49% male and 51% female. According to County Health Rankings, published by countyhealthrankings.org, 91% of residents in Tolland County have a high school degree and 72% have some college experience. This is higher than the CT average of 86% having a high school degree and 68% with college experience. Hampden County has a high school graduation rate of 73% while 57.9% of residents have college experience. This falls below the 85% High School graduation and 71% college experience Massachusetts average.

Connecticut Health Rankings were reviewed for 2015 and 2016 with regard to Health Outcomes and Health Factors. Health Outcome rankings are based on mortality and morbidity measures (weighted equally) and Health Factors are weighted on scores with regard to behavioral health, clinical, social and economic and environmental factors. Of the eight counties in Connecticut, Tolland County is ranked #1 for Health Outcomes and #2 in the state for Health Factors for both years. Hartford County is ranked #7 for Health Outcomes and #5 for Health Factors. These rankings put Tolland County in the 90th percentile, meaning only 10% in the country are better.

Massachusetts Health Rankings with regard to Health Outcome and Health Factors for 2015 and 2016 for Hampden County were not as favorable. Hampden County ranked last in Massachusetts at number 14 in both areas for both years.
**Description of Facilities**

**Johnson Memorial Hospital**

Johnson Memorial Hospital, which is located in Stafford Springs Connecticut, is a general, acute-care facility offering a comprehensive span of inpatient and outpatient services, including medical and surgical care, obstetrics and gynecology, pediatrics, mental health, emergency and intensive care, oncology, rehabilitation, pain management, and more. The hospital achieved the maximum award for its quality of care from The Joint Commission, which accredits Health Care organizations. It is also accredited by the College of American Pathologists, the American Association of Blood Banks, and the American College of Radiology Mammography Accreditation Program. The 92-bed hospital, which has been an anchor institution in north central Connecticut and neighboring Massachusetts towns for over 100 years, and Johnson Memorial Hospital’s other entities are now are members of Trinity Health - New England.

**Home & Community Health Services**

Since 1908, Home & Community Health Services has provided home health and hospice care to residents of north central Connecticut and the bordering towns of western Massachusetts. Home & Community Health Services is located on 101 Phoenix Avenue in Enfield, CT and is licensed by both the states of Connecticut and Massachusetts.

**Johnson Occupational Medicine Center**

Johnson Occupational Medicine Center is an occupational health facility in Enfield. CT which provides occupational and industrial medicine services to local businesses.

**Johnson Surgery and Outpatient Services Center**

An outpatient department of Johnson Memorial Hospital located on the Enfield, CT Campus, offering technologically advanced same-day surgical procedures. The Center also offers a state-of-the-art diagnostic imaging center which features a full range of radiology, nuclear medicine and laboratory services,

**Johnson Memorial Cancer Center**

The Johnson Memorial Cancer Center is a state-of-the-art facility located on the Enfield, CT Campus that offers a full range of cancer care services. Located within the Cancer Center is the 14-chair Karen Davis Krzynowek Infusion Center (KDKIC), which provides chemotherapy and biotherapy administration, transfusions, injections and other outpatient services in a comfortable environment. KDKIC also houses a pharmacy and laboratory onsite. Saint Francis Hospital and Medical Center provides medical directorship for the Johnson Memorial Cancer Center.
Advanced Wound Center

The Advanced Wound Center, which is located on the Enfield, CT Campus, offers expert care for difficult wounds. Its team of physicians, nurses, dietitians and other staff are specially trained in wound care evaluation and treatment, including hyperbaric oxygen therapy.

Cardiac and Pulmonary Rehabilitation

Johnson Memorial Hospital's Cardiac and Pulmonary Rehabilitation Center is located in Enfield, CT. The Cardiac Rehabilitation Program is intended for those who have had a heart attack, heart surgery or angioplasty. Johnson Memorial Hospital's Pulmonary Rehabilitation Program helps patients combat chronic obstructive pulmonary disease through education and exercise. It helps patients enjoy an improved quality of life and fewer hospital admissions. Services include phase II and III pulmonary rehabilitation and the Better Breathers Club support group.

Johnson Chemical Dependency

The Chemical Dependency Program is part of the psychiatric services offered by Johnson Memorial Hospital. The outpatient program, located in Enfield, CT treats individuals who have substance abuse disorders, as well as those with co-occurring disorders.

Laboratory and Pathology Services

Johnson Memorial Hospital’s Laboratory is accredited by the College of American Pathologists. The hospital offers outpatient collection centers in Stafford Springs, Enfield and Tolland.

Outpatient Rehabilitation

Johnson Memorial Hospital’s Physical Medicine and Rehabilitation Services enjoy a reputation for excellence, successfully restoring health, and functional capabilities to thousands of area residents coping with a vast array of conditions or injuries. Outpatient Physical Medicine and Rehabilitation services are provided in Enfield and Stafford.

Sleep Laboratory Center

The Sleep Center, which is accredited by The American Association of Sleep Medicine, is equipped with the most advanced software and hardware technology available and features a more expansive array of services than found at most sleep laboratories. The Sleep Laboratory is located in Enfield CT.

The CHNA Process

Johnson Memorial Hospital’s 2016 CHNA is based on an iterative community engagement and data collection strategy that began in July of 2015 and continued for the next eleven months. The goal: long-term community transformation, resulting in stronger community engagement that can lead to improved health.
The process began with the identification of a team representing healthcare, community
development, government and local groups and community foundation agencies. Work
officially began with an agreement among these groups to review existing data sets; engage
DataHaven, a nonprofit data-collection organization specializing in public health, to
complete telephone interviews of community residents; involve program participants and
conduct interviews with “Key Informants” (community leaders and leaders of partner
agencies).

All aspects of the information-gathering process were designed to reach beyond the walls of
the hospital to get answers to the questions: Who? What? Where? How? Throughout, the
emphasis was on significant community input—in the form of telephone interviews with
community members, surveys of program participants, informal discussions with community
leaders and interviews with Key Informants & Focus Groups to gain a better understanding of what is affecting the health of the Johnson Memorial Hospital service area. The team collected data at the local level to facilitate and identify where the greatest needs are concentrated and gathered information from collaborative partners through Key Informant interviews to maximize who should be included for collective impact. The resulting assessment will serve as a starting point for data-based goals and strategies on how to address the needs that have been identified.

Findings from the CHNA will be used to develop a balanced portfolio of interventions in the areas of:

- Socioeconomic factors and the physical environment
- Health behaviors
- Clinical care

**Analysis of Existing Data Sets**

The CHNA team consulted existing data sets from a variety of sources including:

**Healthy Connecticut 2020: State Health Assessment report (2014)**

Healthy Connecticut 2020: State Health Assessment Report (2014) was developed by the Connecticut Department of Public Health with the assistance of the Connecticut Health Improvement Planning Coalition’s Advisory Council. Data was compiled from an abundance of sources from the past year and decade, including 2010 census data, hospital and numerous state reports. Seven focus areas were described: maternal, infant, child health; chronic diseases and their risk factors; infectious disease, mental health, alcohol and substance use; injuries and violence, environmental risk factors, and health system data.


**The ALICE Study of Financial Hardship Report**

This study is based on 2012 data and commissioned by the Connecticut United Ways. The study, carried out by the Rutgers University – Newark School of Public Affairs and Administration (SPAA), utilizes substantial community social and economic data to calculate
Indicators of financial viability and marginality, such as the “ALICE Threshold”. ALICE is an acronym for Asset Limited Income Constrained Employed; the ALICE Threshold is “the actual cost of basic household necessities on a per county basis’’ i.e., the adequate survival level above the federal poverty guidelines. This metric provides a more realistic assessment of the “working poor”. Data are provided by state, by county and major municipal areas.


US Center for Disease Control and Prevention

US Center for Disease Control and Prevention (CDC) works 24/7 to protect America from health, safety and security threats, both foreign and in the U.S. CDC researchers, scientists, doctors, nurses, economists, communicators, educators, technologists, epidemiologists and many other professionals all contribute their expertise to improving public health.

http://www.cdc.gov/

Johnson Memorial Hospital Community Health Profile (2015)

The Johnson Memorial Hospital Community Health Profile (2015) was provided by the Connecticut Hospital Association. This document summarizes the Johnson Memorial service area hospital admissions and related data, with statewide comparisons extracted from data annually reported to the CHA by most hospitals in the state. The report features a demographic and social profile, summaries and key insights concerning 13 “leading health indicators.”

Community Input Sources

The CHNA research team used multiple techniques to engage community member input, including a comprehensive randomized telephone survey, a written participant survey, interviews and informal discussions with “Key Informants”—community leaders and leaders of partner agencies.

The 2015 DataHaven Community Health and Wellbeing Survey

The 2015 DataHaven Community Health and Wellbeing Survey was conducted by DataHaven, a nonprofit public service organization, and was supported by over 100 state and local government, healthcare, academic and community partners. DataHaven, whose mission is “to improve quality of life by collecting, interpreting and sharing public data for effective decision-making,” designed and conducted a telephone survey that collected information from a sampling of 16,820 residents of Connecticut and several zip codes in Westchester County, New York State. The sample was drawn with a random-digit dialing methodology and included subjects from all 169 Connecticut towns. Questions derived from a variety of standard surveys yielded data on residents’ perceptions of their wellbeing, quality of life, neighborhood, employment and public health. The raw data and weighted data aggregated by various demographic variables are available online. This study represents an enormous resource for healthcare and social service agencies throughout Connecticut. 469 residents were surveyed in the Johnson Memorial Hospital service area.
Community Program Survey

The data was gathered from information residents who attended Johnson Memorial Hospital’s community outreach programs. This came in the form of questionnaires and verbal conversations.

“Key Informant” interviews and informal discussions with community leaders (focus groups)

“Key Informant” interviews and informal discussions with community leaders (focus groups) were also used to gain insight into issues affecting the health of the community. The CHNA research team conducted qualitative interviews of community leaders. The majority of Key Informants consulted for this study have lived and/or worked in the Johnson Memorial Hospital service area for many years. Some grew up in the area and have worked there all their lives. Most have been working in the public health field for 10 to 20 years.

CHNA Findings: The Health Needs of the Communities

The top health concerns in the Johnson Memorial Hospital service area identified through analysis of existing data, community survey results and key informant interviews were asthma, behavioral health, diabetes, heart failure, obesity, and substance abuse. Socioeconomic factors identified include employment and poverty, transportation, access to healthcare, & wellness/prevention education.

Once the CHNA team collected all of the data, they analyzed and organized it using a modified version of the “Invest in Your Community: 4 Considerations to Improve Health and Wellbeing for All”, as a guide and framework for its work. The ”Invest in Your Community”, graphic model for community health and wellbeing published by the federal Centers for Disease Control and Prevention (CDC), which can be found on page 22 of the CHNA, proved to be an effective way to frame the data and organize the findings into focused categories that impact health.

The team focused on the CDC’s breakdown of the elements of good health:

- Socioeconomic Factors and Physical Environment, which accounts for 50% of the health “pie”
- Health Behaviors, which account for 30%
- Clinical Care, which accounts for 10%

Please note, that the CDC model considers socioeconomic factors and the physical environment as two separate elements of good health; however, the CHNA team chose to consider them together, as they are often interdependent.

Socioeconomic Factors and Physical Environment

Socioeconomic factors and physical environment have the largest impact on ones health according the CDC model of community health and wellbeing. Good health can be credited to a combination of factors: genetics, lifestyle, environment, medical care, education, and
most importantly, place. Where you live is the greatest predictor of how healthy you will be. People are born with their genetic makeup, but the other factors that contribute to health depend on resources like a good education, safe neighborhood, employment opportunities, affordable housing, appropriate medical care, community support, and an environment that allows for good lifestyle choices. These factors are know as the “social determinates” of health. The key informants consulted for CHNA 2016 had much to say about the socioeconomic factors impacting health, as did the quantitative demographic and public health sources analyzed. Many interviewees said that access to the resources needed for good health is based on economics – specifically, on an individual’s or household’s income. Good lifestyle choices are easier to make when there is enough money available to follow through on them; healthy environments are likewise more easily accessible when an individual or household has the income to afford them.

**Employment & Poverty**

Connecticut is rarely associated with significant poverty. According to the ALICE Report, the state’s poverty rate of 10% is well below the U.S. average of 15%, and the median household income of $67,276 is 24% above the U.S. median of $51,371. That being said, when combined, the numbers of households living below the federal defined poverty level and those living at the ALICE Threshold (Asset Limited Income Constrained Employment) reveal that 35% of households in Connecticut struggle to support themselves. Because income is distributed unequally in Connecticut, there is both great wealth and significant economic hardship. Currently, the top 20% of Connecticut’s population earns 53% of all income earned in the state, while the bottom 20 percent earns only 3%.

Many interviewees said that access to the resources needed for good health is based on economics – specifically, on an individual’s or household’s income. According the DataHaven community survey, 19% of residents in the service area chose a rating of “poor”
when asked “Ability of residents to obtain suitable employment”. According to that same survey, 23% of participants answered yes when asked “Was there anytime during past 12 months when you put off or postponed getting medical care you thought you needed?” Of those that answered yes, their reason for postponing broke down as follows:

<table>
<thead>
<tr>
<th>If Postponed</th>
<th>Connecticut</th>
<th>JMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because of Cost</td>
<td>49%</td>
<td>56%</td>
</tr>
<tr>
<td>Dr of Hospital wouldn’t accept health insurance</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Your health plan wouldn’t pay for the treatment</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>You couldn’t get an appointment soon enough</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>You couldn’t get there when the doctor’s office or clinic was open</td>
<td>26%</td>
<td>27%</td>
</tr>
</tbody>
</table>

*DataHaven Health and Wellbeing Survey

Key Informants for this CHNA maintained that poverty is the underlying factor in all the other barriers to good health. This impacts all aspects of life and makes it difficult for individuals to meet their basic needs, including food. A troubling 12% of participants from the DataHaven Health and Wellbeing survey reported not having enough money to buy food for themselves and/or their family; and 17% of those respondents said this is a monthly trend.

<table>
<thead>
<tr>
<th>Have there been times in the past 12 months when you did not have enough money to buy food that you or your family needed?</th>
<th>Connecticut</th>
<th>JMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>No</td>
<td>87%</td>
<td>87%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Refused</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

* DataHaven Health and Wellbeing Survey

As mentioned, underemployment and lack of financial resources provide barriers to health care in this area, which leads to other issues and tough decisions for families. Both also lead to issues with health insurance, delayed medical appointments and housing. Although the
town has services to help people with underemployment and limited financial resources, many ALICE Households don’t meet the established criteria and therefore don’t qualify for assistance. These people may rely on the food bank, other local services and their church rather than social services.

**Education**

Clearly, the level of educational attainment is correlated with employment and poverty. According to County Health Rankings 91% of residents in Tolland County have a high school degree and 72% have some college experience. For Hampden County, 73% have high school degrees and 59% have some college experience. The high school graduation rate for the United States is about 80% so overall the Johnson Memorial Hospital service area is a well educated population.

**Neighborhoods**

Violence and neighborhood safety have a direct impact on health. Neighborhoods and towns in the Johnson Memorial Hospital service area are extremely safe when compared to the rest of the country. Tolland County has a crime rate of .47 per 1000 residents. That’s well below the 2.3 state rate and the national rate of 3.8. The DataHaven Health supports the CDC data which shows that residents believe the live in a safe community.

<table>
<thead>
<tr>
<th>Percent that strongly agree</th>
<th>Connecticut</th>
<th>JMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are places to bicycle in or near my neighborhood that are safe from traffic, such as on the street or on special lanes, separate paths or trails.</td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td>I do not feel safe to go on walks in my neighborhood at night.</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>People in this neighborhood can be trusted.</td>
<td>83%</td>
<td>88%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The job done by the police to keep residents safe</th>
<th>Connecticut</th>
<th>JMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Good</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>Fair</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Poor</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Don’t know enough about it in order to say</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Refused</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*DataHaven Health and Wellbeing Survey

**Transportation**

Most residents in the Johnson Memorial Hospital service area have their own car or have access to a car, but the lack of public transportation prevents access to health care and
services among people without a car or those who are unable to drive. This has a negative impact on their health by making it difficult to get to medical appointments, grocery stores to buy healthy food, and can contribute to depression and loneliness.

Most people have access to transportation but the small percentage who don’t are often from the most vulnerable population. There are a few transportation services for this population such as car or taxi services, but there are many limitations. People need to notify the services ahead of time and even so, the service may not be available due to high demand. This can make it difficult if someone has multiple appointments in one week or if someone has an acute illness. In some cases the criteria to be eligible for a ride is so strict that people don’t qualify for the services.

<table>
<thead>
<tr>
<th>Do you have access to a car when you need it?</th>
<th>Connecticut</th>
<th>JMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you say you have access...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very often</td>
<td>85%</td>
<td>89%</td>
</tr>
<tr>
<td>Fairly often</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Almost never</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Never at all</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Don't know</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Refused</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

* DataHaven Survey Results

**Health Behaviors**

In the CDC’s model for community health and wellbeing, healthy behaviors account for 30% of the “health equation”. The term refers to choices that individuals make with regard to their lifestyle that are know to influence their health.

Yet, as the CHNA research team discovered, individual choices are profoundly affected by socioeconomic factors and physical environment. Simple activities like walking around the block for exercise or sending the kids to play in a park are out of the question for many residents in the Johnson Memorial Hospital service area because sidewalks are limited and most of the population lives outside of walking distance for parks. Likewise, choosing healthy foods to prevent or fight obesity can be a struggle for those with limited funds who do not have easy access to healthy choices.

**Obesity**

The problem of obesity has gained renewed attention in recent years, especially thanks to First Lady Michelle Obama’s efforts to promote healthy eating. The health risks of obesity have become well known; it has been linked to diabetes, heart disease, and high blood pressure. Although Connecticut has a lower obesity rank than the National average, 26.3% compared to 28.9% according to the US Center for Disease and Prevention, it remains a key concern among providers. Hampden County has an adult obesity rate of 29% according to County Health Rankings.
<table>
<thead>
<tr>
<th>BMI (Based on Q24 Weight and Q25 Height)</th>
<th>Connecticut</th>
<th>JMMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Normal weight</td>
<td>37%</td>
<td>32%</td>
</tr>
<tr>
<td>Overweight</td>
<td>36%</td>
<td>43%</td>
</tr>
<tr>
<td>Obese</td>
<td>26%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*DataHaven Health and Wellbeing Survey*

66% of participants from the Johnson Memorial Hospital service area in the DataHaven Health and Wellbeing were either overweight or obese. The obesity problem in the Johnson Memorial Hospital service area, which in many cases is caused by individual health choices, is also evident when looking at data for the top conditions for inpatient hospitalizations at Johnson Memorial Hospital. Of the top five conditions, four have a direct relationship with obesity: High Blood Pressure (1), Diabetes (2), Heart Failure (4) and COPD (5).

**Substance Abuse**

**Smoking** – Smoking, an individual health choice, causes a spectrum of serious and life threatening illnesses. It can lead to a host of lung diseases including cancer, as well as cardiovascular disease. Yet smoking is a habit among both adults and young people. It is well known that becoming addicted at a young age makes it harder to quit smoking in adulthood. Changes in smoking regulations over the past decade have affected overall smoking rates, but the current rates of smoking among youth and adults is similar, highlighting the challenges to further impact the behavior. Smoking can be influenced by socioeconomic forces, but its addictive properties reach across economic classes. In Connecticut, 16% of adults smoked cigarettes in 2012, a decrease of 1.1% from the previous year. Overall, Connecticut ranked 4th lowest among all states (Healthy Connecticut 2020).

**Other Substances** - The misuse and abuse of prescription medication and opioid-based drugs has increased significantly over the years to become a public health concern in Connecticut. This misuse or abuse includes taking these medications in higher doses than prescribed, for a purpose other than that for which it was prescribed, or taking a medication that was prescribed for another person or obtained off the streets. In Connecticut, residents are more likely to die from unintentional drug overdose than from a motor vehicle accident. The majority of these deaths are linked to overdose of prescription opioid painkillers. Key Informants stressed that the misuse/abuse of painkillers often leads to heroin abuse. According to 2013 CDC report, the Connecticut age-adjusted rate for drug induced mortality is 16.4 per 100,000 population compared to the nation rate of 14.6. Alcohol abuse was frequently mentioned by key informants also.

**Clinical Care**

The CDC’s model of community health and wellbeing identifies one other factor: clinical care. Clinical care encompasses the many types of health care services that modern society relies on, from preventive care to treatment - everyday illnesses to serious, chronic conditions - mental health care to dental care and more.
Access to providers and necessary preventives and treatments is the foundation of clinical care. Yet, the data collected for this CHNA showed that, as with other aspects of the CDC, socioeconomic barriers can and do interfere with access to care.

**Socioeconomic Barriers to Care**

The Affordable Care Act has done much to ensure that citizens can enroll in a health insurance plan, but it is only part of the equation. As with food insecurity, lack of money and reliance on public options for transportation can and do interfere with access to care. Further, so can the parameters that are set by insurance plans: co-pays, referral policies and specific “in-network” providers.

Finally, certain providers may not be available in our community due to the population, or a provider’s business hours might not match the clients’ needs. All of these socioeconomic realities can result in people postponing needed clinical care.

Access to care continues to be a problem in both our service area and the state of Connecticut as a whole. In Johnson Memorial Hospital’s service area, 23% of residents reported delaying care in the past, primarily due to finances, availability of care and insurance concerns.

<table>
<thead>
<tr>
<th>Was there any time during the past 12 months when you put off or postponed getting medical care you thought you needed?</th>
<th>Connecticut</th>
<th>JMMC</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>No</td>
<td>79%</td>
<td>77%</td>
</tr>
<tr>
<td>Don't know</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Refused</td>
<td>1%</td>
<td>1%</td>
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</table>

*DataHaven Health and Wellbeing Survey Results*

**Health Problems of Community’s Residents**

As mentioned earlier, this CHNA explored the specific health problems in the community – many of which are exacerbated by both poverty and barriers to health outlined above. For example, diabetes is a disease where control is dependent on at least two of the major barriers to community health (food insecurity and access to clinical care). It was among the
top-five reasons for both inpatient admissions and Emergency Department non-admissions at Johnson Memorial Hospital. Hospital data also counted high blood pressure, depression, substance abuse, heart failure and asthma.

Community Health Profiles, developed by the Connecticut Hospital Association for the Johnson Memorial service area, show the top five reasons for both inpatient admissions and Emergency Department non-admissions at Johnson Memorial Hospital.

**Asthma**

According to Healthy Connecticut 2020, the prevalence of asthma among adults increased significantly from a low of 10.8% in 2000 to 15.3% in 2010. In 2012, 14.3% of Connecticut adults were told that they have asthma. The proportion of children with asthma ranged from 14.9% in 2005 to 18.7% in 2012. In 2012, asthma affected an estimated 400,000 adults. In 2012, the proportion of children with asthma was significantly greater than that for adults, suggesting that childhood asthma may be increasing at a greater rate than asthma among adults.

*Healthy CT 2020*
**Behavioral Health**

Mental health can have profound effect on quality of life. According the Healthy Connecticut 2020, 18% of adults in Connecticut will have a diagnosis of depression in their lifetime. The quantitative data and key informant interviews highlight the magnitude of the mental health issue. It is a well-recognized fact that poverty has important implications for both physical and mental health. Several key informants advocated that mental health is a disease that requires care, but the challenges of living in poverty are a barrier to care when treating the disease.

One example used by a key informant to demonstrate the relationship between depression and poverty was a hypothetical story of a senior resident who didn’t have access to a vehicle. Because this individual didn’t have access to a vehicle, and public transportation isn’t an option in the community, the result is missed doctor appointments and spending all of their time alone in their house. This barrier can lead to isolation, which leads to depression and other health concerns. According to the U.S. Census Bureau 11 million, or 28% of people aged 65 and older in the United States, lived alone in 2010. While living alone doesn’t inevitably lead to social isolation, it is certainly a predisposing factor.

Depression was the third most prevalent condition among hospitalizations in the inpatient setting and the fifth most prevalent condition in the emergency department non-admission setting. Seniors had the largest number of inpatient encounters for depression, closely followed by adults, while young adults had the largest number of emergency department non-admission encounters for depression. During FY2014, Johnson Memorial Hospital had 132 emergency department non-admission visits and 151 inpatient admissions for suicides and self-inflicted injuries.

![Depression - By Age](image)

*JMH Community Health Profile*
Cardiovascular Disease (heart failure)

Connecticut is experiencing over 27,000 years of potential life lost due to premature death as a result of heart disease, according to Healthy Connecticut 2020. The rates of high blood pressure and heart disease in Connecticut are approximately 30%.

Cardiac issues can cause a ripple effect that touches every area of life, which is especially hard for those who live in poverty or near-poverty. This, in turn, affects their wellbeing dramatically. For example, cardiac issues can result in mobility problems, which impact an individual’s ability to get to the doctor, move around in the house and even bathe.

Diabetes

In Connecticut, over 9% of adults are diagnosed with diabetes. This represents a significant increase in the past 10 years. Diabetes is often the result of other health concerns, including obesity, limited access to healthy food, and lack of physical activity. As with obesity, behavior changes related to diabetes is a long process and requires patients to remain motivated to make lasting changes.

Going Forward: Making our Community a Healthier Place to Live and Work

Many of the key informants consulted during this CHNA had strong opinions on the ingredients for a healthy community. These typically focused directly on the socioeconomic and clinical care factors that affect health outcomes. The socioeconomic and clinical care factors mentioned most often were:

- Adequate employment that pays enough for people to support their families
- Safe and Affordable Housing/Neighborhoods
- Healthy food options and information about nutrition
- Leadership that promotes healthy living and lifestyles
- Quality education for children
- Access to health care and physicians
- Access to health education services
- Supportive community with high community involvement

Another common theme was the need for communication and dissemination of information between the various organizations and local and state agencies to each other and residents.

Johnson Memorial Hospital will use the information gathered from the 2016 CHNA to develop a Strategic Plan for Community Transformation. This Strategic Plan will be framed using the CDC model of community health and welling. Johnson Memorial Hospital will work with community residents, local organizations, the CHNA team, and partners from Trinity
Health - New England to develop a plan that is consistent with its mission. Having affiliated with Trinity-Health, Johnson Memorial is poised to meet the challenges that will come.

The Hospital reserves the right to amend the implementation strategy, which will be finalized by mid-November of 2016, as circumstances warrant. For example, certain needs may become more pronounced and require enhancements to the described strategic initiatives. During the three years ending 6/30/2019, other organizations in the community may address certain needs, indicating that the Hospital could then refocus its limited resources to best serve the community.

**Invest in Your Community Template**
Acknowledgments

Creating a comprehensive, useful and engaging CHNA is a difficult task. Including the voices of the community, analyzing the data available and focusing the findings in a meaningful way requires input from many sources. This document would not have been possible without the generous support from the following groups and individuals, who took the time to share their knowledge, tell their stories and engage in discussion about potential solutions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tung Nguyen</td>
<td>City of Hartford Department of Health and Human Services</td>
</tr>
<tr>
<td>Gina Federico-Musli</td>
<td>Community Solutions</td>
</tr>
<tr>
<td>Steve Balcanoff</td>
<td>Connecticut Children’s Medical Center</td>
</tr>
<tr>
<td>Mary Stuart</td>
<td>Curtis D. Robinson Center for Health Equity</td>
</tr>
<tr>
<td>Lawrence Young</td>
<td>Curtis D. Robinson Center for Health Equity</td>
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<tr>
<td>Mark Abraham</td>
<td>DataHaven</td>
</tr>
<tr>
<td>Yvette Bello</td>
<td>Hartford Foundation for Public Giving</td>
</tr>
<tr>
<td>Scott Gaul</td>
<td>Hartford Foundation for Public Giving</td>
</tr>
<tr>
<td>Greg Palmer</td>
<td>Johnson Memorial Hospital</td>
</tr>
<tr>
<td>Rebecca Crowell</td>
<td>Saint Francis Hospital and Medical Center</td>
</tr>
<tr>
<td>Marcus McKinney</td>
<td>Trinity Health - New England</td>
</tr>
<tr>
<td>Deborah Pacik</td>
<td>University of Connecticut Medical School</td>
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</table>

Key Informants

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian S Tucker</td>
<td>M.D.</td>
<td>Family Practice Doctor</td>
</tr>
<tr>
<td>Laura Panciera</td>
<td>Director, Elderly Outreach &amp; Municipal Agent on Aging</td>
<td>Town of Stafford</td>
</tr>
<tr>
<td>Patrice Sulik</td>
<td>Director of Health</td>
<td>North Central District Health Department</td>
</tr>
<tr>
<td>Laura Marin</td>
<td>Board Member &amp; Director</td>
<td>Safe Net Ministries</td>
</tr>
<tr>
<td>Group</td>
<td>Description</td>
<td></td>
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<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Enfield Hunger Action Team</td>
<td>Hunger Action Teams aim to jumpstart the conversation about food insecurity and the causes of hunger.</td>
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</table>