



Mount Sinai
Rehabilitation Hospital
Trinity Health – New England
Community Health Needs Assessment
2016

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Executive Summary

The start of this Community Health Needs Assessment (CHNA) would likely be defined as the first meeting we had as a team back in March of 2015. But really it began as soon as the last CHNA was published in 2013. The lessons learned from that experience informed our approach and led us to the Centers of Disease Control Health Invest Model, which provides a framework for understanding the volumes of available data. We also had the benefit of the DataHaven Community Health and Wellbeing Survey, which provides significant input from community members.

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 discussions with local providers, a community phone survey and information gathered from local health departments, community-based organizations and program participants.

The health priorities for the Mount Sinai Rehabilitation Hospital and the Mandell Center for Comprehensive Multiple Sclerosis Care include:

- Lack of coordinated and comprehensive care for MS patients
- Patient frustration with disjointed rehabilitation care
- Increased need for research to better understand MS treatment options
- Access to comprehensive rehabilitation facilities.

Introduction

In recent years, the world of healthcare has undergone tremendous upheaval; old norms have imploded and new expectations have taken hold. Mount Sinai Rehabilitation Hospital strives to facilitate and enhance individual recovery, function, and optimal performance with an emphasis on those populations with impairments that either place them at risk or result in temporary and/or permanent disability.

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.

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.

Purpose Statement

Serve as a regional and national leader in the delivery of coordinated rehabilitation services.

The CHNA & Report on Progress

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 Mount Sinai Hospital's ongoing efforts to be a center of healing for its local and regional communities.

Mount Sinai published its first federal mandated CHNA in 2013 in collaboration with Saint Francis Hospital, Hartford Health and Human Services, CT Children's Medical Center and Hartford Hospital. The health needs identified in the 2016 CHNA will be integrated into a three-year community health and well-being plan and implementation strategy by utilizing existing resources, strengthening partnerships and creating innovative programs on both the hospital campus and within the community.

The CHNA completed in 2013 identified three priority issues related to the work at the Rehabilitation Hospital, they include:

- **Improvements in Communication Between Patients and Providers**

The Language Services Program (3+1) is now in effect throughout the entire hospital and its offsite locations. During FY2015, over 15,000 patients and their caregivers took advantage of the improved communication offered by this resource. The hospital now spends over \$300,000 annually to support this program, which includes a new initiative to train bilingual staff who can assist with interpretation. Thus far, 25 staff members have been trained to serve as qualified interpreters.

- **Improved Access to Care**

Services at Mount Sinai Rehabilitation Hospital have increased dramatically in the past few years enabling patients to better access the services needed to address their physical health needs.

Mandell MS Center: Services Offered

2008

- Neurology
 - Neurologist 1 day/wk
 - Physician Assistant
- Physiatry
- Skilled Therapy: PT,OT,ST (not dedicated)
- P/T nurse
- Neuropsychologist

2015

- Neurology
 - Neurologist 4 days/wk
 - PA Full time
 - Recruiting second neurologist
- Physiatry
- Urology
 - Urologist 1.5 days/wk
 - Urodynamics RN
 - Ultrasound tech
- Infusion Center
 - Infusion Nurse Full time
 - Per diem Infusion Nurses-2
 - Medical Assistant
- Case Management
- Skilled Therapy:
 - PT (3), OT (2), ST (1) –dedicated MS team
- Neuropsychology
- New Services
 - Pharmacy
 - Integrative Medicine(yoga, accupuncture)

Enhanced Partnerships to Increase Quality of Life

Community Programs at Mount Sinai are focused on helping patients re-learn and re-organize their lives to include meaningful enrichment activities. Below is a listing of those programs.

Community Programs

C.A.R.P Community Adaptive Rowing Program
Golfers in Motion
Community Support Groups
Stroke
Amputee
Multiple Sclerosis
Powerful Tools for Caregivers
Art Therapy
Pet Therapy
Equestrian Therapy

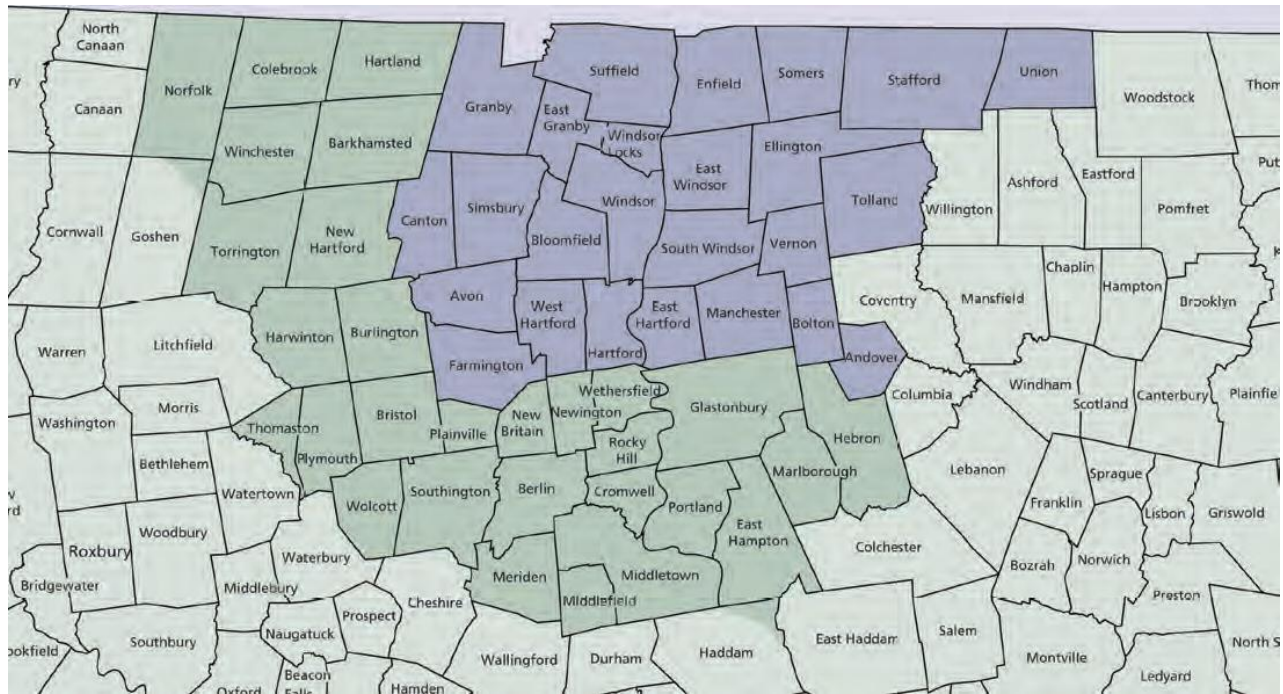
Need for Coordinated Care

Coordination of care has been addressed by improving the variety of co-located services and adding auxiliary care services such as pharmacy and integrative medicine on-site.
(See Listing of Services Offered – Previous Page)

Overview of Hospital Service Area and Facilities

Service Area

Mount Sinai Rehabilitation Hospital’s service area comprises urban, suburban and rural communities that together form a rich and complex mixture of highly diverse populations—a rainbow spectrum of races and ethnicities, and a huge range of socioeconomic categories. Hartford is much poorer, younger and more densely populated than the surrounding towns. Given this inequity and the percentage of Mount Sinai patients who are from the city, this CHNA has a significant focus on Hartford data and the critical health needs facing its residents.



Patient Population - Fiscal Year 2015-2016

Patient Age	N	Percentage
0-44	93	14
45-64	246	35
65-74	161	23
75-140	195	28
TOTAL	695	100

Gender	N	Percentage
Male	372	54
Female	322	46
TOTAL	694	100

Ethnicity	N	Percentage
Asian	6	1
Black	159	23
Hispanic	50	7
Native American	0	0
Pacific Islander	0	0
White	480	69
TOTAL	695	100

Primary Payor	N	Percentage
Private	50	22
Medicare	295	48
Medicaid	88	13
Other	0	4
Dual Eligible	91	13
TOTAL	524	100

Diagnosis	N	Percentage
Stroke	279	40
Neurologic	43	28
Orthopedic	49	16
Other	0	16
TOTAL	371	100

Population

Today, the major employers in the Greater Hartford region include United Technologies, Hartford Financial Group, Chase Enterprise, St. Paul Travelers Insurance, Hartford Hospital, Aetna, Bank of America and Saint Francis Hospital. Most of those who work as professionals for these corporations do not live in the city; they reside in more affluent surrounding communities that make up Saint Francis Hospital's secondary service area.

Hartford's population of 125,000 is composed of all races and myriad ethnicities. Some 44 percent of its citizens are Hispanic/Latino and 35 percent Black/African American, with subgroups that include refugees and immigrants from Africa, Eastern Europe, the Middle East, Asia, South America and the West Indies. Additionally, 22 percent of the total population in Hartford is foreign-born, bringing a tremendous diversity to the city.

The city is proportionately younger than the rest of the state as well as the country; over 25 percent of its residents are under age 17, and only 9 percent are over age 65, as compared to 22 percent and 15 percent for the state as a whole. This affects age-related health issues such as some forms of cancer, violence and accidental injury.

Hartford is a city of vibrant neighborhoods—17 distinct neighborhoods, to be exact—with a variety of housing stock ranging from high-rise downtown luxury apartments and condos to historic houses to single-family homes and a variety of rental options. The city's many neighborhoods are supported by a roster of community organizations that focus on issues such as economic development, housing, assimilation of new immigrants, education and historic preservation.

The city's 18 acres are dotted with green space—more than 20 parks of all sizes, which provide a respite from the commotion of the urban environment.

Description of Inpatient Programs

- **The Stroke Program:**

The Stroke Program is designed to assist patients and families with the physical, cognitive, emotional and psychological effects of a stroke. Education for patients and families is a key component, with support/adjustment groups and classes held on a regular basis.

- **Orthopedic Trauma Physical Therapy:**

The Orthopedic Program is designed to treat people with amputations, multiple trauma, joint replacements, and hip fractures with medical complications. The program uses individual and group therapy.

- **Traumatic Brain Injury Physical Therapy:**

The Brain Injury Program is designed to treat people with traumatic brain injury, anoxic/hypoxic brain injury, encephalopathies, and brain tumors. A 14-bed secured unit allows patients maximum mobility within a safe, contained environment. Patient rooms are designed to minimize distractions and confusion, and a daily orientation group is held to maximize patients' awareness of their surroundings and strengthen cognition.

- **Spinal Cord Injury Physical Therapy:**

The Spinal Cord and Neurological Program is designed to treat people with traumatic and non-traumatic spinal cord injuries and neurological conditions, such as multiple sclerosis, motor neuron diseases, polyneuropathy, Guillain-Barré syndrome, muscular dystrophy and Parkinson's disease. The focus is to educate patients and families with the ultimate goal of maximizing independence and transition into a new lifestyle.

- **The General Rehabilitation Program:**

The General Rehabilitation Program is designed to treat people who have become debilitated from a serious illness or after a long hospital stay. Conditions include cardiac recovery, oncology, post-surgery and complex medical care.

Descriptions of Specialized Outpatient Programs

- **The Day Treatment Program:**

Mount Sinai Rehabilitation Hospital's Day Treatment Program provides services for people with brain injury and stroke who are able to live at home, but whose daily lives can be improved through organized, intensive outpatient therapy. The focus of the Day Treatment Program is to successfully reintegrate individuals into home, community, and vocational environments. This is achieved through individual therapies as well as specialized groups. Patients also participate in community outings in order to practice and carry over skills they are practicing during therapy sessions in a functional, real-life setting.

- **Orthotic and Prosthetic Clinic:**

In order to be comfortable, and to function well without causing injury, orthotics and prosthetics need to fit your body as precisely as possible. The Orthotic and Prosthetic Clinic at Mount Sinai is here to see to it that your orthotic or prosthetic is the best possible fit for your body and your lifestyle. At the Orthotic and Prosthetic Clinic, you will meet with a physician, as well as an orthotist or a prosthetist. This team will work with you, possibly using evaluation braces, temporary braces, shoe inserts, or other preliminary tools, in order to arrive at a prescription for an orthotic or prosthetic. Once your orthotic or prosthetic has been crafted, the Orthotic and Prosthetic Clinic team will train you in its proper use, from positioning and attaching it to performing common tasks while the orthotic or prosthetic is in place. As your needs change, the Orthotic and Prosthetic Clinic team will remain available to ensure that you remain equipped with a well-fitted and appropriately designed orthotic or prosthetic.

- **Wheelchair Clinic:**

When prolonged or lifetime use of a wheelchair is prescribed, there is no 'one size fits all' solution. Every wheelchair user's needs must be addressed in the choice of manual or power drive, design, weight, and, especially, in wheelchair fit. The Wheelchair Clinic is comprised of a physician, an occupational therapist, and a medical equipment representative. The physician and occupational therapist will perform a comprehensive evaluation that includes an assessment of your current and predicted future living and working environments, a physical therapy evaluation, an assessment of any current mobility equipment you may be using and its ability to meet your needs, your current diagnosis and prognosis, and a functional assessment of your needs regarding seating and mobility. Once your wheelchair has been obtained, the Wheelchair Clinic will continue to work with you to ensure proper wheelchair positioning. This is important in helping you to establish and maintain functional independence, while promoting good posture, breathing, and digestion, and avoiding skin problems.

- **The Connecticut Adaptive Rowing Program:**

The Connecticut Adaptive Rowing Program provides individuals with a physical disability or visual impairment the opportunity to engage in exercise that makes use of all available muscle groups. The program is based on the Connecticut River at the Greater Hartford Jaycees Community Boathouse in Hartford's Riverside Park. It is led by therapeutic rehabilitation specialists and physical therapists from Mount Sinai Rehabilitation Hospital. Safety is a priority. Participants receive comprehensive training before going out on the water with an experienced coach. In adaptive rowing, boats are outfitted with modified equipment to accommodate disabilities. The two-person shells can be outfitted with fixed seats to provide support and added security for individuals with limited or no use of their legs. Pontoons are utilized to increase stability.

- **The Joyce D. and Andrew J. Mandell Center for Comprehensive Multiple Sclerosis Care:**

The goal at The Joyce D. and Andrew J. Mandell Center for Comprehensive Multiple Sclerosis Care and Neuroscience Research is to make those options available to patients and their families living with the disease. The individualized care we provide utilizes the combined resources within the center.

The CHNA Process

Mount Sinai Rehabilitation 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 Mount Sinai 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.

http://www.ct.gov/dph/lib/dph/state_health_planning/shaship/hct2020/hct2020_state_hlth_assmt_032514.pdf

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.

http://alice.ctunitedway.org/files/2014/11/14UW-ALICE-Report_CT.pdf

Needs Assessment on the Southeast Asian Population in Connecticut (2014)

was conducted by the Asian Pacific American Affairs Commission. The report presents data from a cross-sectional, face-to-face survey with 300 Asian Pacific residents of Connecticut (100 of Laotian origin, 100 Vietnamese and 100 Cambodian). Extensive data on demographics, health issues, health access were collected.

Hartford 06120 (2015)

is a report generated by the My Brother's Keeper/Violence Free Zone Coalition. The report details the community assessment, program development and preliminary outcomes of the coalition's efforts to support education, foster employment opportunities and reduce violence among Hartford's North End youth. Data presented include a demographic profile and data on employment, educational attendance and graduation and violent injury data. The report concludes with recommendations for sustaining and enhancing the programs developed by the coalition.

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.

The Curtis D. Robinson Center for Health Equity Participant Survey (2015) generated data by conducting voluntary written participant surveys at public, typically faith based, health screening events conducted by the center’s staff. Demographic data, checklists of health concerns and access issues were collected in an effort to determine priorities for health education and engagement activities.

CHNA Findings: The Health Needs of the Communities

The top health concerns in the Mount Sinai 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 one's health according to 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 known as the "social determinants" 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

The data about poverty in Hartford is dramatic. When combined, the numbers of households living below the federally defined poverty level and those living at the ALICE Threshold (Asset Limited, Income Constrained, Employed) reveal that only 31 percent of Hartford households had adequate income, compared to statewide figures of 65 percent of households with adequate income (see Figure 6). The DataHaven survey found that the median household income for Hartford is \$29,313; less than half that of the state average of \$69,899.

Many interviewees said that access to the resources needed for good health is based on economics—specifically, on an individual or household's income. Good lifestyle choices are easier to make when there is enough income available to follow through on them; healthful environments are likewise more easily accessible when an individual or household has the income to afford them. Time and again, the Key Informants consulted for this CHNA cited poverty and/or low income as a significant barrier to a healthy community. "When it comes to poverty, you have very, very limited opportunities and options and that absolutely, directly impacts who you are, how you are and your overall wellbeing," said one.

Nor does Hartford's overall employment rate fare well when compared to that of the state as a whole. Some 59 percent of Hartford residents held jobs during the 30 days prior to the survey, as compared to 65 percent statewide. And twice as many Hartford residents were actively seeking employment as residents of the state as a whole (see Figure 7).

Twice as many people are looking for employment in Hartford compared to the state overall. Some of the Key Informants for this CHNA maintained that poverty is the underlying factor to all the other barriers to health, and said that it impacts all aspects of life and makes it difficult for individuals to meet their basic needs. As one person said, "It affects everything." Another Key Informant summed up the issue of poverty and its global impact on the quality of life by saying, "The barriers that have been identified [education, employment, and safety]. . . are really about opportunity and resources. . . . It's a lot more challenging and difficult for individuals to be able to secure employment that is actually able to sustain a quality of life for them and their families."

Education

Clearly, the level of educational attainment is correlated with employment and poverty, which determines where children live and, in turn, which schools they attend. One Key Informant put it like this: "In a larger sense, it's a city that is so poor, it has less of a tax base and that impacts city services, so then it impacts the education system. So it creates, in a sense—I hate to say a cycle of poverty 'cause I hate the way that usually is used—but in this sense, poverty impacts the city's ability to turn the situation around unless larger systems are changed in a much more fundamental way."

Only 70 percent of Hartford residents over age 25 have a high school diploma, as compared to 90 percent of state residents. Additionally, just 5 percent of city residents complete college, compared to 37 percent of residents throughout the state. Data from Hartford 06120 by the My Brother's Keeper/ Violence Free Zone Coalition highlights the issue of chronic absenteeism, which affects the rate of graduation. In the Northeast neighborhood, between 30 and 65 percent of students are absent from school each day. If this were due to illness, it would be seen as an epidemic.

Neighborhoods

Violence and neighborhood safety have a direct impact on health in areas of Hartford. Some of the residents surveyed noted that they feel unsafe in crosswalks and walking on sidewalks, while others bemoaned the lack of bike lanes. Even more reported feeling threatened walking the streets in their own neighborhoods (see Figure 8). Indeed, homicides and physical violence are a frightening reality in some areas. In 2015, Saint Francis had 2,985 Emergency Department visits and 225 inpatient admissions resulting from attempted homicides and intentional injuries. Hartford 06120, the report by My Brother's Keeper/Violence Free Zone, noted that the city's homicide rate increased from 15 murders in 2014 to 31 homicides in 2015. A survey by the Curtis D. Robinson Center for Health Equity found that 46 percent of Hispanic respondents had been "impacted by violence" (see Figure 10?). This finding is supported by data from the National Center for Children in Poverty, which found between 25 and 90 percent of children and youth experience events that leave them traumatized.

Trauma has a disproportionate effect on members of minority groups. Using statistics from the Saint Francis Hospital Trauma Registry and Medical Center, Hartford 06120 reported that in 2015, 75 percent of its trauma patients were black/African American; 18.5 percent were Hispanic and 7.3 percent were white or "other."

For some Hartford residents, violence seems to be something they know and live every day. One Key Informant put it this way: "We get a lot of the gunshot victims. So after the gunshot, they're going home paralyzed, same home, same neighborhood, same idea that violence may be the answer. The nurse goes in and makes a home visit and it is in this environment where they're plotting and planning that you're not even certain if you're safe."

Housing

Housing is a basic human need, and one that contributes to health in innumerable ways, both directly and indirectly. As one of our Key Informants noted, “You may have the most wonderful hospital in the world, but if people are going home to houses that are not properly heated, or going to poison them because of lead, or in neighborhoods where you worry if you send your children outside, then it’s not a healthy community.”

Some 20,000 housing units in Hartford were constructed prior to 1960, according to Healthy Connecticut 2020 (see Figure 11?). Older housing brings with it an assortment of threats to health that range from deteriorated conditions to insufficient heat to high levels of lead. In Hartford, over 3 percent of children less than age 6 have blood lead levels over 5 µg/dl 2 which puts them in the 97th percentile as compared to national lead levels.

One Key Informant commented that for some city residents, being able to afford any housing at all remains a challenge. Lacking enough income and/or consistent income, “they jump from one housing place to another,” resulting in a lack of stability and continuity in other areas of life, including their health care, the informant said. Home ownership in Hartford is very low, at 26 percent, compared to a state average of 67 percent.

DataHaven developed a “Housing Insecurity Rate” which is made up of a set of questions that measure the cost of housing compared to income; rate of home ownership; satisfaction with current housing; length of residency and plans for continued residency. The rate of housing insecurity in Hartford is 12 percent, twice that of the state overall. This lack of housing stability impacts both physical and emotional health and is inextricably linked to poverty.

As one Key Informant said, “Poverty impacts housing; if folks don’t have a sustainable job and a sustainable income, they jump from one housing place to another and especially for the young children, it doesn’t create the kind of stability that is needed.”

Food Insecurity

Food insecurity—the lack of regular access to a high-quality, varied and healthful diet, or worse, the lack of regular access to any food at all—is common in Hartford. More than one-third of residents surveyed reported lacking enough money to feed themselves or their families at some point in the 12 months prior to the survey, and of those, 25 percent said this happened repeatedly (see Figure 11). “People who are below poverty [level] tend to need food assistance all the time,” said one Key Informant. Those who are working but still, as the Key Informant said, “‘near poor,’ are not necessarily eligible for any government assistance, but they’re not making enough money to pay all their bills. That makes them food-insecure.” Even for those who can buy food, the availability of healthful food is yet another challenge, especially for people who must rely on mass transportation and live in neighborhoods without supermarkets where fresh produce and other healthful choices are available. “You have the mom-and-pop stores and the bodegas, but when we talk about access to healthy foods and vegetables, you don’t see that in Hartford.”

In Hartford, over one-third of residents surveyed report not having enough money to feed themselves and their families. Of the people who don’t have enough money for food on a regular basis, 25 percent don’t have enough food almost every month. Children were living in over 30 percent of the homes that reported inadequate money for food. Compare this to Connecticut as a whole, where just over 10 percent of residents reported insufficient funds to pay for food on a regular basis.

Health Behaviors

In the CDC's model for community health and wellbeing, health behaviors account for 30 percent of the health equation. Health behaviors refer to choices that individuals make with regard to their lifestyle or habits that are known to influence their health. Data about diet and exercise, obesity and substance abuse are included in this section.

Several Key Informants commented that people who face multiple significant challenges--starting with poverty and continuing with the struggles in housing, education, child care, safety and others that result—simply don't have the bandwidth left over to make health and/or healthy lifestyle choices a priority.

Diet, Exercise, and Obesity

The problem of obesity has gained renewed attention in recent years, especially thanks to First Lady Michelle Obama's efforts to promote healthful eating and exercise. The health risks of obesity have become well known; it has been linked to diabetes, heart disease and high blood pressure.

But despite the widespread publicity about the benefits of a healthy diet and maintaining a healthy weight, making behavioral choices to fight obesity is more of a challenge in some neighborhoods than others. It's easier to eat fresh produce on a regular basis when it is available in a nearby supermarket that you can get to in a private car and you have sufficient income. For those who rely on mass transportation, have no local markets that carry fresh foods, and can't afford higher-priced selections, eating for health—a key health behavior—is no easy matter.

As one Key Informant said, "A lot of the general public does not understand the connection between food insecurity—let's just call it simply someone who's been hungry—and obesity. They may be eating food because it's donated food and that's all they're being offered. . . . Someone with high blood pressure is eating too much salt because that is what's donated—a whole lot of canned food. And they're eating canned food two and three times a day, if that's what they're being offered." Another Key Informant pointed out: "Someone who is working two or three jobs in order to feed their family . . . [has] very little time left in their day to do basic things: go to the food store, prepare a meal, shop, or meal planning. And so they end up needing to do things in the shortest amount of time, which generally means less healthy options."

The rate of obesity in Hartford is 33 percent, comparable to that of the state of Alabama—which means that the prevalence of obesity among Hartford residents is equivalent to that of the top five states with the highest rates of obesity nationwide. In contrast, the state of Connecticut is ranked 43rd for overall obesity rates.

Data from the Curtis D. Robinson Center for Health Equity Participant Survey showed that diseases linked to health-related behaviors impact Hartford residents at alarming rates.

Substance Abuse

- **Smoking**, another 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. Although changes in smoking regulations over the past decade have affected overall smoking rates, the current rates of smoking among youth and adults is similar, highlighting the challenge to further impact this behavior. This is important in part because becoming addicted at a young age makes it harder to quit smoking in adulthood.
- **Other Substances:** The impact of substance abuse on Hartford residents is significant. More than one-third of survey respondents indicated that substance abuse is a problem that impacts themselves or their family. For Hispanic respondents, this percentage increased to 46 percent.

Opioid use and abuse of prescription drugs at the national level has increased, and the Hartford region is no different. Alcohol and Substance Abuse is one of the top 5 reasons for Emergency Department non-admissions at Saint Francis. The issue of opioid use was also mentioned by health leaders in surrounding towns served by Saint Francis.

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 Hartford and the entire state of Connecticut. Over 20 percent of residents report delaying care in the past year, primarily due to finances and insurance problems. Remarkably, in a city with a relatively high density of health care facilities, 35 percent of residents could not get an appointment in a timely fashion and 32 percent couldn't get to the facility when it was open.

Health Problems of Community's Residents

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.

Behavioral Health

Mental health can have profound effect on quality of life. According to 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.

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:

- Healthy food options and information about nutrition
- Adequate employment that pays enough for people to support their families without the need to work two or three jobs
- Safe and affordable housing
- Good-quality education for both for children and adults
- Culturally sensitive support systems

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.

Hartford's Assets

The Key Informants who participated in this CHNA noted that despite the numerous problems the city must face, it has many assets as well. They enumerated the city's physical assets, including its neighborhoods, hospitals, and parks. While they acknowledged the city's tangible assets, they also emphasized intangibles. Almost every Key Informant said that diversity enriches the city of Hartford and makes it a more interesting place to live and work.

They also cited the number and quality of its community-based organizations, some of them with national reputations. The leaders and staff of these organizations are passionate, intelligent and have a deep understanding of Hartford, the residents, politics and ecosystem as a whole.

Ranking Priorities

On September 13th 2016 a Community Conversation was held with leaders and community members to discuss the findings of the Community Health Needs Assessment and identify the priorities to be included in the Strategic Implementation Plan. The evening meeting was held in an accessible location and over 35 people participated representing a wide array of community organizations from those addressing violence prevention and homelessness to clinical care providers, faith leaders, and community members. The discussion included an overview of the findings and a participatory exercise designed to get input from everyone. The County Health Rankings Model was used to outline the broad topics for ranking priorities.

The following items were identified:

1. Community Safety and Violence
2. Housing Insecurity and Transportation Needs
3. Family and Social Support
 - a. Behavioral Health
 - b. Neighborhood Support and Resources
4. Employment and Poverty
5. Access to Care

The next step in our process will be to evaluate how these priorities are related to the work of a Rehabilitation Hospital and incorporate this information into our strategic implementation plan.

Next Steps/Conclusion

Clearly there is much work ahead for public health organizations, of which Mount Sinai Hospital is just one. Setting up a health care infrastructure that is able and equipped to take on the barriers to community health will require:

- Strong leadership and a committed set of coalition partners.
- Maintaining an iterative ongoing community engagement process.
- A broad focus on community health and wellbeing.
- An understanding that the climate for community transformation work has changed.

This information will be used to develop a Strategic Plan for Community Transformation. The groundwork has already begun with the development of the Wellbeing 360 Coalition. This group will play a critical role in reviewing the findings here and working to develop a plan for change. Having affiliated with Trinity Health, Mount Sinai Hospital is poised to meet the challenges that will come.