



ATHOL HOSPITAL | HEYWOOD HOSPITAL | HEYWOOD MEDICAL GROUP | QUABBIN RETREAT



2021 COMMUNITY HEALTH NEEDS

ASSESSMENT KEY FINDINGS AND COMMUNITY IMPROVEMENT STRATEGIES

Heywood Healthcare (HH) and
HealthAlliance-Clinton (HA-C) Hospital

CHNA METHODOLOGY

Report Findings Inform HH & HA-C Future Improvement Plans, Programs, Policies, Practices and Services

Stakeholder Engagement Throughout CHNA Process

- Montachusett Regional Planning Commission (MRPC) collected data and wrote the report (2021 & 2018)
- Collaboration with Health Equity Partnership (CHNA-9)
- Engagement of CBAC committee
 - Diverse representation and SME's
 - Internal collaborators, external collaborators and residents

Set Agenda

Data Collection

Data Analysis

Draft Report

Review and Edit

Publicize Report

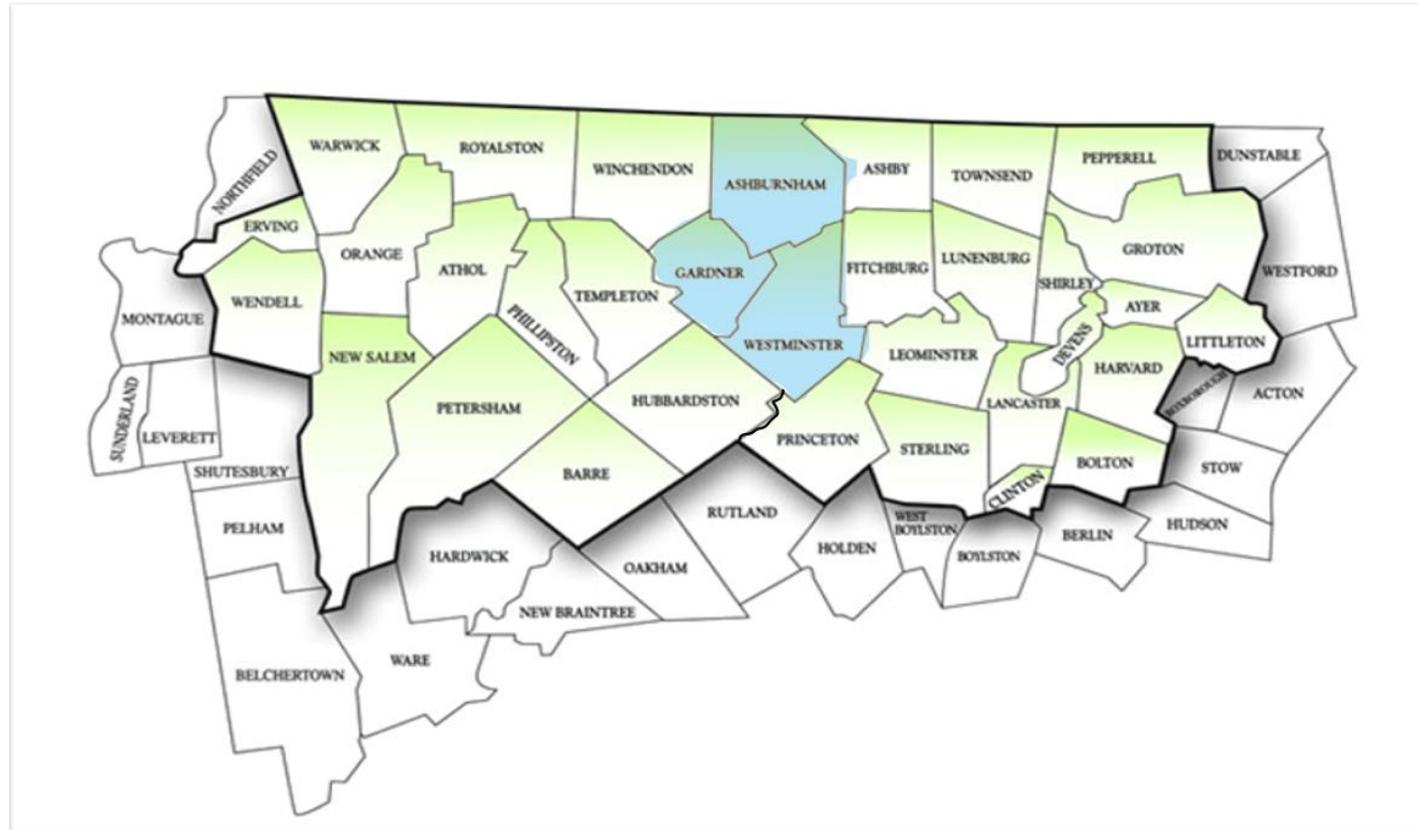
SERVICE AREA

- **Athol Hospital Service area:**

- Warwick
- Erving
- Wendell
- New Salem
- Orange
- Royalston
- Athol
- Petersham
- Phillipston

- **Heywood Hospital Service Area:**

- Templeton
- Winchendon
- Gardner
- Hubbardston
- Westminster
- Ashburnham



- **Clinton Hospital**

- Ashburnham
- Ashby
- Bolton
- Clinton
- Fitchburg
- Gardner
- Harvard
- Lancaster
- Leominster
- Lunenburg
- Princeton
- Sterling
- Townsend
- Westminster

The Report findings will be presented for the HH and HA-C Service area and broken out by each hospital area.

CHINA HEALTH AREAS AND CONTEXT

COVID-19 Pandemic

Impact on Sub-Populations

Race, Sexual Orientation,
Gender Identity

Youth and Adolescents

Older Adults

Veterans

Chapter 1- Population Characteristics

Chapter 2- Socioeconomic Characteristics

Chapter 3- Maternal and Infant Health

Chapter 4- Environmental Health

Chapter 5- Infectious Disease

Chapter 6- Injuries and Violence

Chapter 7- Behavioral Health and Addiction

Chapter 8- Wellness, Chronic Disease and
Mortality

PRIORITY POPULATIONS AND HEALTH AREAS

COVID-19 Pandemic

Racial/Ethnic
Minorities &
Indigenous
Populations

Recent
Immigrants &
Non-English
Speakers

Low Income
Populations

Aging
Population
(Older
Adults)

Veterans

Homeless

Children/
Adolescents

LGBTQIA+

Social Determinants

- Income & Employment
- Poverty
- Education
- Broadband/Technology
- Environmental Justice
- Housing (Blood Lead Levels)
- Homelessness
- Transportation

Interpersonal Violence & Injury

- Child Maltreatment
- Elder Maltreatment
- Interpersonal Violence

Mental Health & Substance Use

- Mental Health
- Self-Inflicted Injuries & Suicide
- Substance Misuse
- Tobacco/Nicotine use
- Opioid use

Wellness & Chronic Disease

- Nutrition & Food Insecurities
- Overweight and Obesity
- Diabetes
- Asthma
- Heart Disease
- Cerebrovascular (stroke)
- Cancer

COVID-19 PANDEMIC

COVID-19:

- Health Equity and Racial Disparities
- 19% 65+ reported spending most of their savings and/or losing a job due to the pandemic. This percentage increase to 32% and 39% for black and Hispanic/Latino adults (national data).
- In June 2020, 56% of older adults reported feeling isolated often, compared to 28% in June 2018. (national data)
- The pandemic exacerbated issues of food access, due to store closure, public transportation travel restrictions, and economic hardships
- *“To obtain a Covid-19 shot, a patient has to read the English language, have a computer, have a phone, have a lot of time and energy to make multiple calls, and understand the system as a whole” –Racial Equity Focus Group*

COVID-19 PANDEMIC

Area	Massachusetts	Heywood Healthcare	HA-C Hospital
COVID-19 Cases (June 2021)	663,822	6,428	17,906
Vaccination Rate 1 st dose (Nov 2021)	81%	69%	76%
Vaccination Rate fully vaccinated (Nov 2021)	69%	60%	65%

Table: Noah R Bombard | MassLive Source: Mass. Dept. of Public Health [Get the data](#) Created with [Datawrapper](#)

Outlier towns for percentage of fully vaccinated individuals include include Winchendon (51%), Lancaster (55%) and Ashby (56%)

DATA SOURCES

■ **Secondary Data Sources:**

- US Census Data
- Massachusetts Department of Public Health
- Massachusetts Department of Mental Health
- Heywood, Athol, Clinton Hospital Data
- American Community Survey Data
- Massachusetts Department of Labor and Workforce Development Data
- Youth Risk Behavior Surveillance Systems Data
- Behavioral Risk Factor Surveillance System Data

DATA SOURCES CONT.

■ Primary Data Sources:

- Hosted meetings March through May 2021
- All meetings used virtual format
- Larger meetings included breakout groups
- Conducted 18 Focus Groups total
- Approximately 209 participants
- COVID limited access to certain populations
- Surveys
 - 1,321 community responses
 - 41% completion rate

FOCUS GROUP	TYPE	DATE
GARDNER COMMUNITY ACTION TEAM	PROVIDER	March 9
PATIENT & FAMILY ADVISORY COUNCIL	COMMUNITY	March 18
CLINTON AREA PARTNERSHIP	PROVIDER	March 24
GARDNER CHAMBER OF COMMERCE	PROVIDER	March 25
NORTH QUABBIN FOOD ALLIANCE	PROVIDER	March 29
CLINTON COMMUNITY STEWARDS	COMMUNITY	March 30
SCHWARTZ ROUNDS	PROVIDER	April 7
CHNA-9 BHMHSU	PROVIDER	April 8
YOUTH CHANGE LEADERS	COMMUNITY	April 14
TRANSPORTATION GROUP	PROVIDER	April 20
NORTH CENTRAL HOMELESSNESS TF	PROVIDER	April 21
GAIT	PROVIDER	April 23
TRANSPORTATION GROUP	PROVIDER	April 28
CARE TRANSITIONS	PROVIDER	May 4
RACIAL JUSTICE	PROVIDER	May 17
LGBTQ+	PROVIDER	May 19
DISABILITIES	PROVIDER	May 20
VETERANS	PROVIDER	May 21

POPULATION CHARACTERISTICS

Area	Massachusetts	HH	HA-C Hospital
Population Growth	5.9%	2.5%	3.0%
% Population 5-14	10.9% (-0.6%)	11.1% (-1.4%)	12.3%
% population 65+	+2%	+2%	+1-2%
Median Age	39.7 years	42.1 years	41.2 years
% Hispanic/Latino	±0%	+0.7%	+0.4%

SOCIOECONOMIC CHARACTERISTICS

Housing

- Both HH and HA-C Hospital have residents who are cost-burdened in their housing costs. Meaning they are paying greater than 30% of their income on housing costs (rent or mortgage)

	Massachusetts	Heywood Healthcare PSA	HA-C Hospital PSA
Renters	49.5%	40%	40.5%
Average Rent	\$1,282	\$1,017	\$1,141
Homeowners	30.1%	27%	21.7%
Average Mortgage	\$2,225	\$1,586	\$2,083

- Outlier towns (rental): Wendell (75%), Warwick (68.4%), Orange (55.6%), New Salem (52.5%), Fitchburg (49.6%)

Childhood Lead Levels

- Ashby, Fitchburg, Orange, and Gardner have the highest asthma prevalence and low lead screening as well as a high percentage of housing built pre-1978
 - % of children screened for lead in HH (50.2%), is lower than the state (72%) and HA-C (75%).

SOCIOECONOMIC CHARACTERISTICS

Transportation

- 5.1% of those 16 and up do not have access to a vehicle in HH, 4.7% in HA-C and 12.4% in MA

"Transportation issue is huge among my clients, 70% of my clients cannot access transit."

■ Vehicle Related Mortality

- Both HH Service Area(15.4) and HA-C(9) close to double the rate of Vehicle-Related Deaths than the state(5.8).
- Outliers: Lancaster (24.9) and Winchendon (27.7)

BUILT ENVIRONMENT

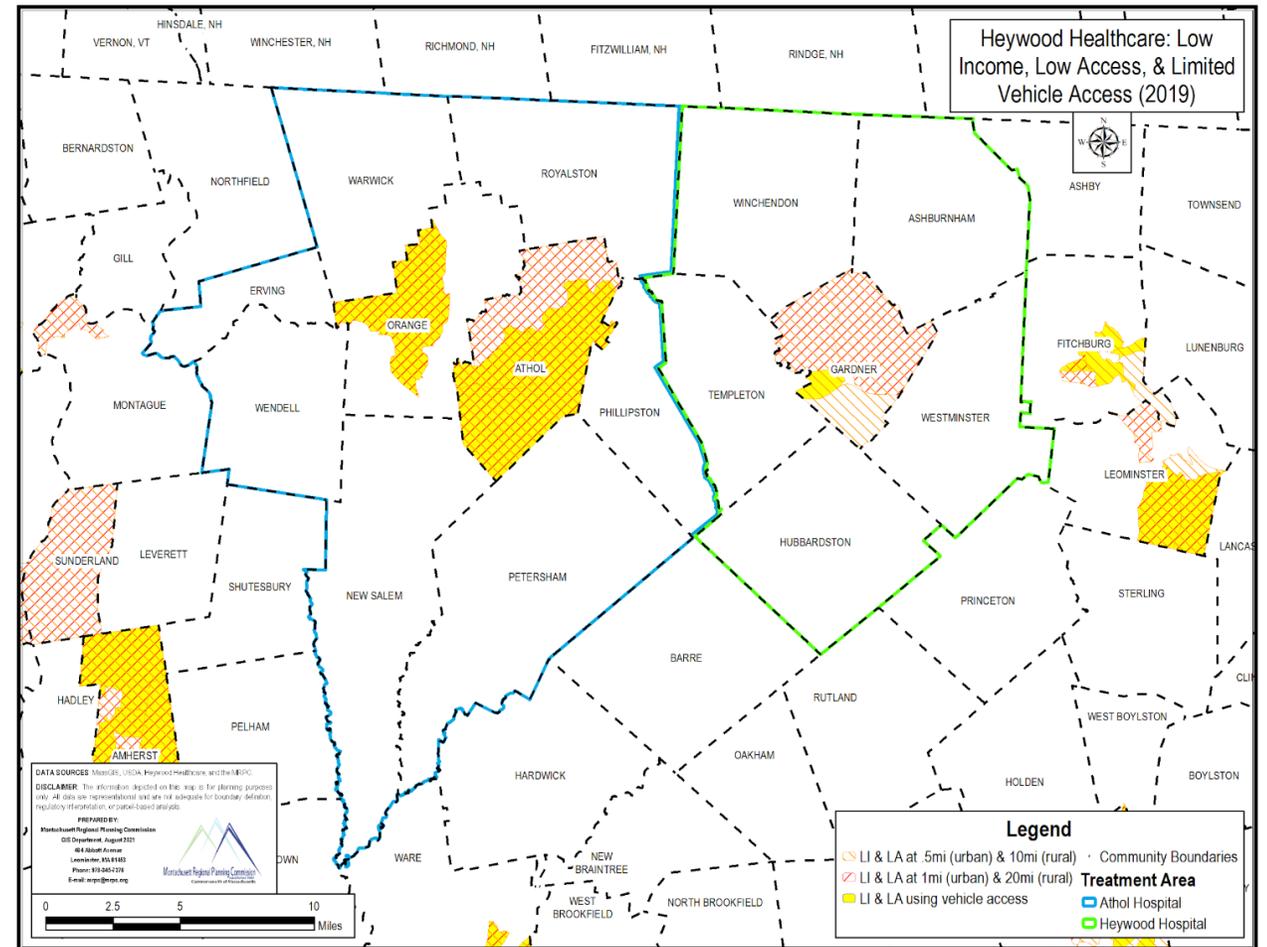
Environmental Justice

- Fitchburg, Gardner, Leominster, Orange, Athol, Harvard, Clinton, Wendell, and Winchendon include neighborhoods that qualify as Environmental Justice populations for minority population, income or both.
- There are 96 brownfield sites in the HA-C service area primarily located in EJ neighborhoods in Clinton (15), Fitchburg (32) and Leominster (15)
- There are 38 brownfield sites in the HH service area primarily in Gardner(15) and Winchendon (8)

BUILT ENVIRONMENT

Food Deserts

- A food desert is an area that has limited access to affordable and nutritious food.
- Winchendon is not considered a food desert based on its proximity to Rindge NH. Residents are unable to use WIC in other states and the state border causes issues with transportation.



SOCIOECONOMIC CHARACTERISTICS

Education

- 9.3% of students in MA have no High School Diploma, 7.1% in HH, and 7.0% in HA-C. Large disparity between towns.
- Within both service areas 88-100% of all teachers are white, compared to 67% of students in HA-C and 86% in HH.
 - 21% of students in the HA-C are Hispanic (+8% from 2011) compared to 0.7% of teachers.
- Districts above the MA average for high needs students include Winchendon, Orange Elementary, Gardner, Franklin Tech, Fitchburg, and Clinton

Community	No HS Diploma
Athol	9.7%
Erving	8.9%
New Salem	5.9%
Orange	10.4%
Petersham	4.6%
Phillipston	8.0%
Royalston	6.0%
Warwick	7.9%
Wendell	4.7%
Ashburnham	2.6%
Gardner	11.0%
Hubbardston	3.1%
Templeton	9.9%
Westminster	4.4%
Winchendon	8.7%
Ashby	6.9%
Bolton	1.1%
Clinton	10.6%
Fitchburg	14.9%
Harvard	2.9%
Lancaster	15.8%
Leominster	12.0%
Lunenburg	6.1%
Princeton	2.5%
Sterling	2.5%
Townsend	4.9%
MA Average	9.3%

SOCIOECONOMIC CHARACTERISTICS

Income and Poverty

- All service area communities have had poverty levels decrease between 2016 and 2019 (**more moving west commuting east**)
 - MA (10.3%) poverty levels is higher than HH (8%) and HA-C(6.5%)
 - Outliers include Athol (17.3%), Gardner (13.9%) and Fitchburg (15.7%)
 - Particularly concerning is the childhood poverty rates across both service areas. Specifically, under 18 rates in Winchendon (18.8%), Athol (15%), Fitchburg (21%), and Leominster (19.6%) and children under 5 in Winchendon (40.1%), Athol (15.4%), Leominster (32.9%), and Fitchburg (28.2%). Which is significantly higher than the state (13.2% & 14.4%)
- In 2020 Heywood Healthcare (10.3%) and HA-C(11.3%) service areas experienced a higher rate of unemployment than the nation (8.1%) and state (9.8%) for that time period.
- In October 2021 Heywood Healthcare (4.8%) and HA-C(4.8%) PSA experienced a lower rate of unemployment than in 2021 and a lower rate than the state (5.3%).

SOCIOECONOMIC CHARACTERISTICS

Veteran Income & Disability

	Massachusetts	HH	HA-C
Overall Median Income	\$65,712	\$71,430	\$100,087
Veteran Median Income	\$42,455	\$45,374	\$47,706
Median income difference	\$23,257	\$26,056	\$52,381
Unemployment gap 2016	2.7%	1.8%	**
Unemployment gap 2019	1.6%	0.1%	-0.7%
% Veterans with a disability 2019	29.3% (+1.4%)	23.9% (+.7%)	23.1

- Median income difference is the difference between the overall median income and the income of the veteran population. HA-C and HH both have a higher difference in income than the state.
- Outliers for veteran disability include Orange (44%), Harvard (44.1%) and Fitchburg (31%)

Health Improvement Strategy Examples

Social Determinants

- Income & Employment
- Poverty
- Education
- Broadband/Technology

- Environmental Justice
- Housing (Blood Lead Levels)
- Homelessness
- Transportation

Heywood Healthcare

HEAL (*Hope, Empower, Access, Live*)

Winchendon

Community movement to improve the health and quality of life of residents by building social capital and community wealth through an Equitable food system.

Anchor Collaborative

Lead by CHNA 9 Anchor Institutions, under the guidance of community members, work with CBOs to improve the economic and social wellbeing of the region. Focus project is workforce development institutional buying power to support local food system.

Diversity & Inclusion Task Force

Community/hospital representatives raising awareness/education on issues related to diversity and health. Focused on addressing health disparities/SDOH

Career Development

In house Nursing Assistant Training-entry point for individuals contemplating a career in healthcare

HOSA- collaboration with schools for students to explore careers in health professions

HA-C

CommunityHELP.net (available in 104 languages)

Link people to community resources using an online resource inventory

Support and collaborate with the **North Region Anchor Collaborative**

Diversity, Equity, Inclusion and

Belonging advisory council with

hospital and community representation

Scholarships & Internship for youth

entering a health career path

Regional (CHNA9)

Anchor Collaborative

Housing First initiative

Volunteer driver and micro-transit

Advocacy through statewide coalitions

INJURIES AND VIOLENCE

Violence & Child Maltreatment

- Greenfield DCF office: % child caseload placement FY 2018 Q1: 27% vs. FY 2020 Q1: 23%
- North Central DCF office % child caseload placement FY 2018 Q1: 23% vs. FY 2020 Q1: 22%
- Greenfield DCF office: children < 18 in caseload FY 2018 Q1: 1,293 vs FY 2020: 1,084
- North Central DCF office: children < 18 in caseload FY 2018 Q1: 2,462 vs. FY 2020: 2,195
- Restraining orders filed in 2020 decreased, likely due to limited access to courts during the pandemic.
 - Since 2019, over 230 youth have been supported through Handle With Care.

INJURIES AND VIOLENCE

Elder Abuse

- Elder mistreatment is largely unrecognized, fewer than 5% of cases are reported

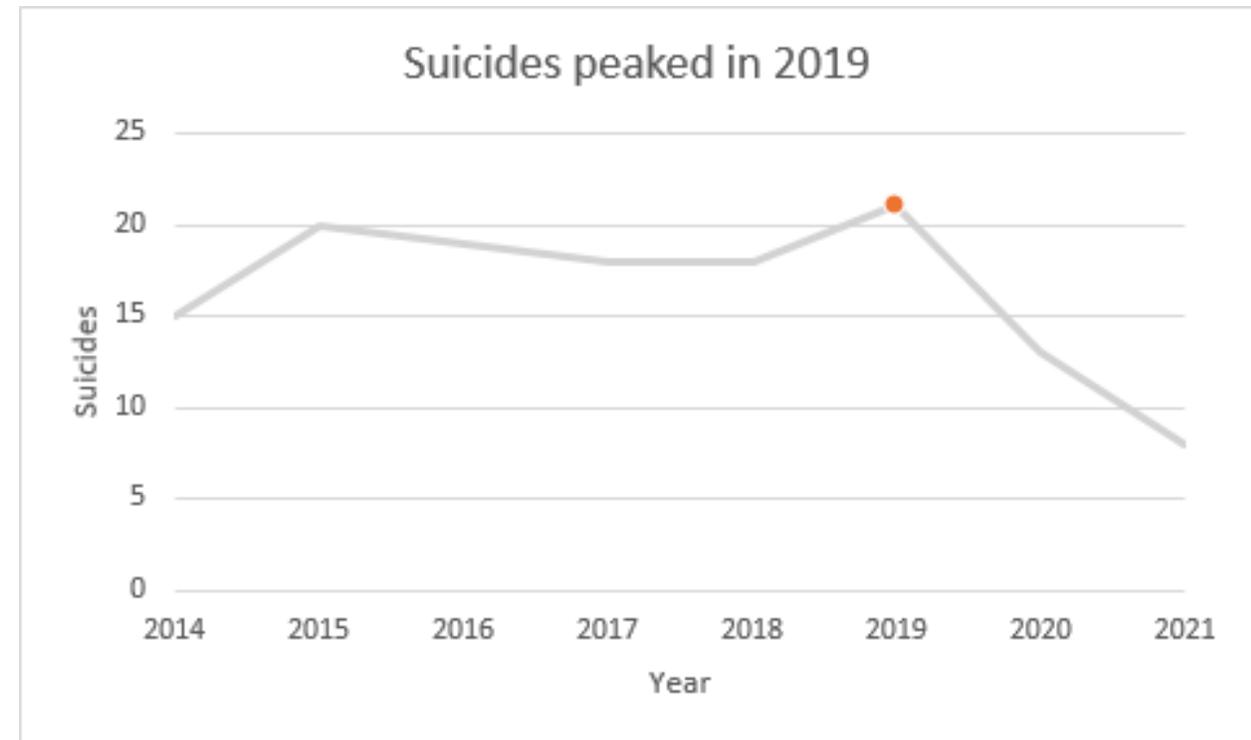
	Male	Female	Total
Elder Abuse	13%	20%	17%
Exploitation	15%	10%	12%
Neglect	18%	18%	18%
Bodily Injury	9%	11%	10.2%
Sexual	.5%	1%	.8%
Self-Neglect	44.5%	40%	42%
TOTAL	100% (233 cases)	100% (352 cases)	100% (585 cases)

July 2020-June 2021 LifePath Protective Services Cases

INJURIES AND VIOLENCE

Suicides

- **The suicide rate in both HH (10.4) and HA-C (13.4) is higher than the MA rate (10)**
- There has been a decline in number of suicides from 2015 to 2020 in Heywood Healthcare Service Area, HA-C Service Area, and in Massachusetts.



Montachusett Suicide Prevention Task Force Catchment Area: Data from Mass State Police DA and DA Sullivan's Offices

Health Improvement Strategy Examples Injuries and Violence

- Child and Elder Maltreatment
- Interpersonal Violence
- Suicide

Heywood Healthcare

Handle With Care

Multi-sector system approach to ensuring that children exposed to trauma in their home, school, or community receive appropriate interventions & support to help them achieve academically and grow personally.

Collaboratory to Address Elder Mistreatment

A care model for identifying elder mistreatment in health care settings and connection to community support

Suicide Prevention Task Force

Serves 22 towns. Mission is to prevent suicide by providing education and resources to help those who struggle with depression, survivors of suicide, and those who have lost loved ones to suicide.

HA-C

Conduct **domestic violence screening** in the hospital inpatient and emergency department settings to identify people at risk of domestic or interpersonal violence and link them to community-based services

Organize and facilitate **peer support group**

Regional (CHNA9)

Advocating for passage of the Healthy Youth Act. Educating schools on using evidence-based K-12 health curricula that promote healthy relationships.

Advocating for passage of legislation that increases protections for sexual assault survivors and their children.

BEHAVIORAL HEALTH AND ADDICTION

- The high rates of self-reported mental health issues within school aged children demonstrates the importance of early intervention by the school, community, and health professionals.
- All categories are highest within the LGBTQ community
- Large disparity between genders
- Quabbin area communities were the only ones to do the YRBS, should fall in line with state and service area

BHA - xx Self-Reported Mental Health Responses from 2021 Franklin County/North Quabbin YRBS

Mental Health	Grade Level			Income		Gender		Race		Sexual Orientation	
	8th Grade	10th Grade	12th Grade	Low Income	High Income	Female	Male	Students of Color	White Students	LGBTQ	Hetero-sexual
Felt anxious for 2 weeks (past 12 months)	38%	44%	47%	46%	42%	56%	26%	48%	43%	68%	33%
Felt sad or hopeless for 2 weeks (past 12 months)	39%	42%	44%	44%	41%	51%	28%	42%	42%	66%	33%
Seriously considered suicide (past 12 months)	14%	20%	15%	20%	15%	20%	10%	20%	16%	33%	10%

Sources: 2019 Franklin County/North Quabbin YRBS 2021 YRBS

BEHAVIORAL HEALTH AND ADDICTION

Opioid Use

- Fatal Opioid Overdose rates have increased in the HA-C (34%), Heywood Healthcare (29%) and MA(15%) from 2015-2019
- The largest increases were in Ashburnham, Ashby, Fitchburg, Leominster, Lunenburg, Townsend, Westminster, Lancaster, Sterling, Winchendon, Athol, Erving, New Salem, and Petersham

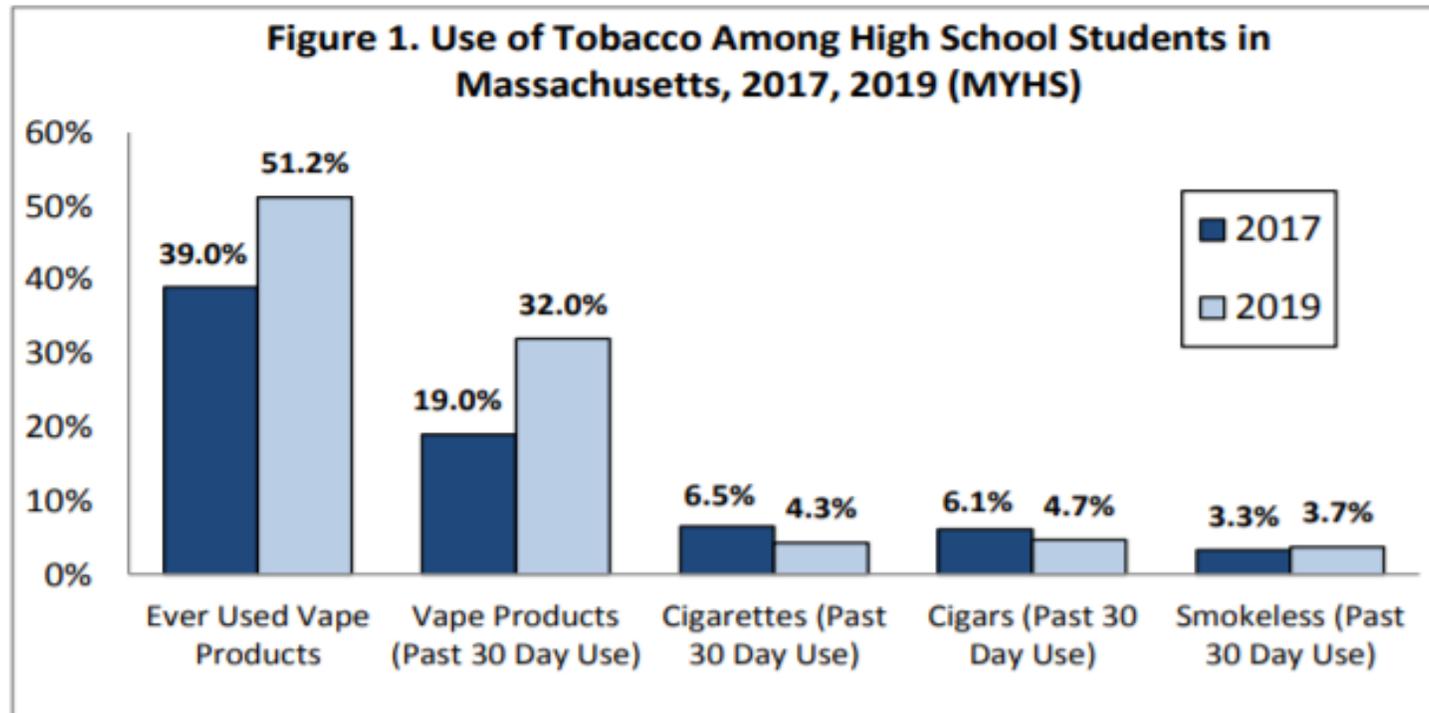
Smoking

- Smoking rates for HH and HA-C have increased since the last CHNA where the state rates have decreased

Area	Massachusetts	HH	HA-C
Smoking Rates	13.7%	19.5%	16.9%
Opioid Overdose	+15%	+29%	+34%

BEHAVIORAL HEALTH AND ADDICTION

- In 2015, 23.7% of high school youth reported “current use” of electronic nicotine products while 15.9% reported current use of all other tobacco products. These rates each fell slightly in 2017 to 20.1% and 11.4%, respectively.
- Use of Tobacco among HS students in Massachusetts has increased from 2017 to 2019



Health Improvement Strategy Examples

Mental Health & Substance Use

-Mental Health

-Substance Misuse

-Tobacco/Nicotine use

-Opioid use

Heywood Healthcare	HA-C	Regional (CHNA9)
<p>School-based Tele-BH and SU Services Provides School Based telebehavioral health services for highschool students in area schools. The program started in the Athol, Mahar, and Narragansett school districts and has expanded to Gardner and Winchendon.</p> <p>Support Groups MENders- A Men's support group promotes healthy living and offers coping skills for managing symptoms associated with mental illness and substance use.</p> <p>Peer Recovery Coaches Financial support for peer recovery coaches. Trained peer specialists offer community support for an individual. An effective intervention/prevention tool as part of an person's SUD treatment and recovery plan.</p>	<p>Opioid Task Force, including representatives from police, fire, first responders, public health departments, and other community organizations</p> <p>Organize support groups with mental health organizations in the community to support those suffering from behavioral issues and their families and caregivers</p>	<p>Connecting community and youth groups to evidence-based trainings that increase resilience, active bystandership, and intervention skills.</p> <p>Advocating for legislation that reduces time spent in ED for mental health/SUD and increases access to treatment.</p> <p>Encouraging adoption of models such as Coordinated Community Response Teams to provide wraparound/navigation services.</p>

NUTRITION, CHRONIC DISEASE AND MORTALITY

Mortality

- Heart disease and cancer caused over 40% of all deaths in both service areas in 2017
- The premature death rates in the Athol Hospital PSA(444.8), Heywood Hospital PSA(620.5) and HA-C PSA (436) are all significantly higher than the state rate (282)
- In the HH PSA, Suicide dropped from 8th leading cause of death in 2015 to below 10th in 2019

RANK	Mortality Cause HH	Mortality Cause HA-C	Mortality Cause US
1	Heart Disease	Heart Disease	Heart Disease
2	Total Cancer	Total Cancer	Total Cancer
3	Stroke	Stroke	Accidents
4	Lung Cancer	Chronic lower respiratory diseases	Chronic lower respiratory diseases
5	Chronic lower respiratory diseases	Lung Cancer	Stroke
6	Opioid Related	Opioid Related	Alzheimer's disease
7	Influenza and Pneumonia	Diabetes	Diabetes
8	Diabetes	Female Breast Cancer	Nephritis
9	Female Breast Cancer	Suicide	Influenza and Pneumonia
10	Motor Vehicle/Suicide (tie)	Influenza & Pneumonia	Suicide

NUTRITION, CHRONIC DISEASE AND MORTALITY

Childhood Wellness

Asthma

- K-8 Asthma prevalence in MA (12.1) is lower than HH (12.8) and higher than HA-C (11.5)
 - Outliers: Athol (17.5), Fitchburg (16.7), Ashby (16.6)

	Nashoba Regional YRBS 8 th grade	Franklin County YRBS 8 th grade
Ate breakfast all 7 days in the past week	54%	38%
Drank a caffeinated beverage at least once in the past week	63%	---
Ate 3 or more fruits/vegetables yesterday	---	55%
Described self as being slightly or very overweight	28%	21% (all HS)
Played on at least one sports team this past year	69%	64%

NUTRITION, CHRONIC DISEASE AND MORTALITY

SNAP Gap

- The difference between the number of low-income Massachusetts residents receiving MassHealth who are likely SNAP eligible and the number of people actually receiving SNAP.

	HH	HA-C
SNAP Gap	40%	44%

- Outliers Harvard (87%), Bolton (77%), Sterling (71%), Princeton (75%)

NUTRITION, CHRONIC DISEASE AND MORTALITY

Cerebrovascular Disease

- The rate of cerebrovascular deaths per 100,00 in HH (62.5) and HA-C (62.2) are significantly higher than the state average (34.4)
 - Biggest outlier in Gardner (135.9)

Diabetes Deaths

- The rate of diabetes deaths per 100 in MA (8.6) is lower than HH (9.1) but higher than HA-C (2)
 - The rate in HH increased by 1.6 per 100 while the MA rate increased by 1.52 from 2014 to 2018

NUTRITION, CHRONIC DISEASE AND MORTALITY

Heart Disease Deaths

- The rate of heart disease deaths in HA-C (204.2) and HH (224.4) is higher than the rate in MA (176.5)
 - The HH rate increased by 10 per 100,000 while the MA rate increase by 39 per 100,000 from 2015 to 2019.

Cancer Deaths

- Lung cancer death rates in Athol (102.5) and Ashby (124.2) are over double the rate of MA (44.6)
- Breast cancer death rates in New Salem (99.1), Ashburnham (63.7), and Phillipston (56.1) are significantly higher than the MA average (13).

Health Improvement Strategy Examples

Nutrition & Chronic Disease

- Nutrition & Food Insecurities
- Obesity
- Diabetes

- Asthma
- Heart Disease
- Cerebrovascular (stroke)
- Cancer

Heywood Healthcare	HA-C	Regional (CHNA9)
<p>Weekend Backpack Program A backpack of healthy food provided at school for children and families to take home on the weekend.</p> <p>Food is Medicine Links patients with food related chronic conditions to community food resources. Program offers Produce Prescriptions to encourage produce consumption.</p> <p>Food System Partnerships (Local Food Works Quabbin Food Connector) Strengthening our local and regional food economy and used a s strategy to improve population health</p> <p>School-based Telehealth Services School based medical healthcare within high schools.</p> <p>Gardner Area Interagency Team Multisector membership provides opportunities for networking, information sharing on community services, and collaboration on addressing community health needs.</p>	<p>Cultivate healthy foods in the community garden on hospital premises</p> <p>Support access to cancer screening and treatment for low income, uninsured adults, including access to mammograms, colorectal screening, CT Scans, etc.</p> <p>Nutrition & Chronic Disease education Support programs in clinical and non-clinical settings that educate and screen patients for diabetes, hypertension, and persistent asthma</p>	<p>Local Food Works a functional and equitable food system built by and for all stakeholders in the North Central region.</p> <p>Advocating for policies that improve access to physical activity and gardening in low-income housing neighborhoods.</p>

Thank You



ATHOL HOSPITAL | HEYWOOD HOSPITAL | HEYWOOD MEDICAL GROUP | QUABBIN RETREAT

