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Hartford HealthCare

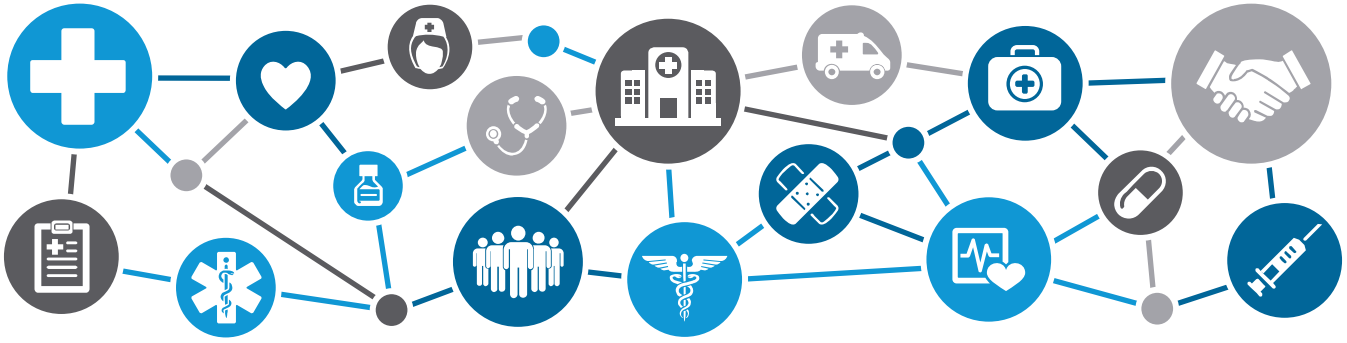
BACKUS HOSPITAL

Community Health Needs Assessment

June 2018

TABLE OF CONTENTS

INTRODUCTION AND OVERVIEW



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ENGAGEMENT BACKGROUND AND PURPOSE

The 2018 Community Health Needs Assessment ("CHNA") for Backus Hospital ("Backus" or the "Hospital"), a 213-bed, not-for-profit acute care community hospital that is part of Hartford HealthCare's East Region, leverages numerous sources of local, regional, state and national data along with input from community-based organizations and individuals to provide insight into the current health status, health-related behaviors and community health needs for the Hospital service area.

In addition to assessing traditional health status indicators, the 2018 CHNA took a close look at social determinants of health such as poverty, housing, transportation, education, fresh food availability, and neighborhood safety. Social determinants of health have become a national priority for identifying and addressing health disparities, and Hartford HealthCare is committed to addressing these disparities through the Community Health Improvement Plan that will follow this Assessment.

This CHNA will be used to develop an ongoing, measurable Community Health Improvement Plan ("CHIP") that will focus on those top priorities identified in this CHNA in order to:

- Improve the health status of the community;
- Identify opportunities for better preventive care and wellness initiatives;
- Address social determinants of health and health disparities within the service area;
- Continuously improve access to and quality of health care and community education that will enable community members to improve their overall well-being.

Percival Health Advisors, a national health care advisory firm with a strong commitment to community health improvement efforts, conducted this Community Health Needs Assessment in conjunction with Hartford HealthCare, its East Region Board, and its many community health partners.

METHODOLOGY OVERVIEW

This assessment incorporates data from both quantitative and qualitative sources. The quantitative assessment allows for comparison of leading health indicators to benchmark data at the state and national levels. Additionally, where available, local data was compared to Healthy People 2020 ("Healthy People") target metrics.

The Healthy People initiative provides national objectives for improving the health of all Americans. The objectives were developed through an extensive stakeholder feedback process that integrates input from public health and prevention experts, and federal, state and local government officials, a consortium of more than 2,000 organizations, and perhaps most importantly, the public.

Key sources of quantitative data include, but are not limited to:

- Connecticut Department of Public Health
- Centers for Disease Control and Prevention
- Connecticut Hospital Association
- United States Census Bureau
- U. S. Department of Health & Human Services

In addition to the quantitative data sources outlined above, qualitative input was used to further inform the CHNA. Focus groups, community forums, and individual key informant interviews were conducted from February to May 2018 with representatives from Hartford HealthCare, the Hospital and numerous community-based organizations and social services agencies. Participants were asked to identify and discuss the top community health issues facing the service area. These responses were tallied and summarized, and additional qualitative perspective was added from key informant interviews. This summary was presented to the Hartford HealthCare East Region Board, covering Backus Hospital, for further discussion and input regarding the top community health needs and priorities.

IRS FORM 990 SCHEDULE H

For non-profit hospitals, a Community Health Needs Assessment (CHNA) also serves to satisfy specific requirements of tax reporting, under provisions of the Patient Protection & Affordable Care Act of 2010. The following table cross-references which sections of this report relate to the hospital's reporting requirements on IRS Form 990 Schedule H.

IRS Form 990 Schedule H	Report Page(s)
Part V Section B Line 3a A definition of the community served by the hospital facility	19-22
Part V Section B Line 3b Demographics of the community	23
Part V Section B Line 3c Existing health care facilities and resources within the community that are available to respond to the health needs of the community	53-55
Part V Section B Line 3d How data was obtained	7-8
Part V Section B Line 3e The significant health needs of the community	11-12
Part V Section B Line 3f Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	Addressed Throughout
Part V Section B Line 3g The process for identifying and prioritizing community health needs and services to meet the community health needs	13-17
Part V Section B Line 3h The process for consulting with persons representing the community's interests	5
Part V Section B Line 3i The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)	56-64

DATA SOURCES

In addition to the information provided by Hartford Healthcare and the Hospital, the external data sources included for each section of this report are as follows:

Data Element	Data Source
• **Local Area Definitions**	Connecticut Department of Public Health
• **Characteristics and Causes of Death**	Centers for Disease Control and Prevention
• **Insurance Coverage Estimates**	Connecticut Hospital Association
• **Medically Underserved Areas** • **Health Professional Shortage Areas**	U.S. Department of Health & Human Services
• **Demographics** • **Ethnicity Distributions** • **Median Household Incomes** • **Homeownership Rates**	The Nielsen Company
• **Poverty Metrics** • **Unemployment Rates** • **Educational Metrics**	American Community Survey
• **Children in Poverty and Single-Parent Households** • **Linguistically Isolated Populations** • **Uninsured Population Estimates** • **Clinical Provider Ratios** • **Physical Environment Metrics**	County Health Rankings
• **Crime Rates**	State of Connecticut
• **General Health Status Indicators**	Connecticut Department of Public Health Centers for Disease Control and Prevention
• **Cancer Prevalence and Screening Indicators**	Community Commons Health Indicators Report
• **Cardiovascular Disease**	Connecticut Department of Public Health Community Commons Health Indicators Report
• **Respiratory Disease**	Connecticut Department of Public Health Community Commons Health Indicators Report
• **Diabetes**	Connecticut Department of Public Health County Health Rankings Centers for Disease Control and Prevention
• **Infectious Diseases**	Connecticut Department of Public Health Centers for Disease Control and Prevention
• **Sexually Transmitted Diseases**	Centers for Disease Control and Prevention Community Commons Health Indicators Report
• **Births and Prenatal Care**	Centers for Disease Control and Prevention
• **Health Behaviors**	Connecticut Department of Public Health
• **Benchmark Metrics**	HealthyPeople2020

KEY PARTICIPANTS AND CONTRIBUTORS

The qualitative information included in this report was gathered through interviews, focus groups, surveys, planning sessions and discussions with representatives from the following organizations:

- American Ambulance
- Backus Hospital
- Catholic Charities
- Center for Health Aging, Windham Hospital
- Eastern Connecticut AHEC
- Generations Family Health Center
- Greater Norwich Area Chamber of Commerce
- Integrated Care Partners
- Madonna Place
- Mashantucket Pequot Tribal Nation
- Mohegan Tribe & Mohegan Sun
- Norwich Public Schools
- Reliance Health
- Rose City Senior Center
- Senior Resources Agency of Aging
- Southeastern Mental Health Authority
- Southeastern Regional Action Council
- Thames Valley Council for Community Action
- Three Rivers Community College
- UConn Student Health Services
- Uncas Health District
- United Community & Family Services (UCFS)
- United Services

LIMITATIONS IN DATA AND INFORMATION

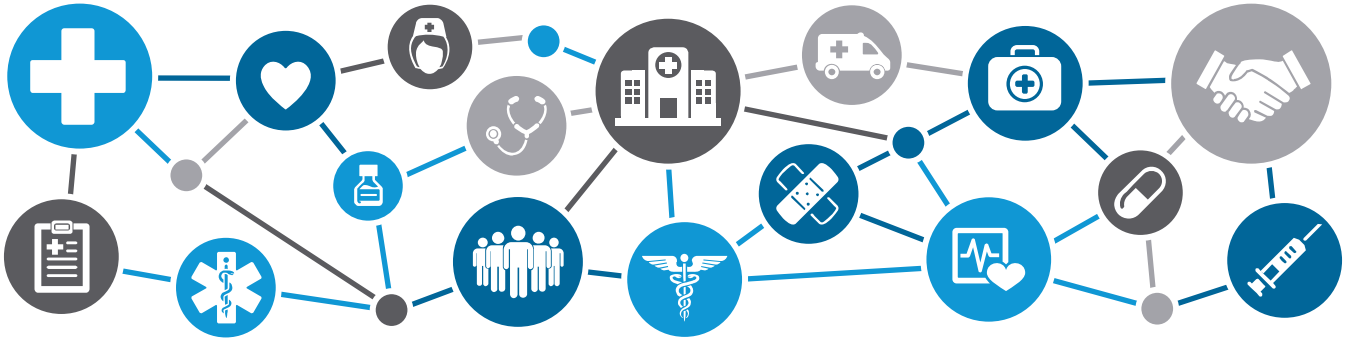
While this report was designed to provide a comprehensive assessment of the community's overall health, we recognize that it cannot accurately measure all possible aspects of the community's health.

This assessment incorporates a significant amount of quantitative data that was collected from a variety of sources. However, this information was sometimes limited as to the level of geographic detail or demographic identifier, availability for all diseases and health indicators, and by the timeliness of the information's reporting period.

Qualitatively, many community individuals were involved in the development of this report, however, given that input was not provided by all community members, there may be instances where specific health issues are not adequately represented.

These information gaps could potentially limit this report's ability to assess all of the community's health needs.

KEY FINDINGS AND PRIORITIES



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SIGNIFICANT COMMUNITY HEALTH NEEDS

Based on data analysis, surveys, focus groups, interviews and work performed by The Eastern Connecticut Healthcare Collaborative ("ECHC", which is a community collaborative), these are the top community health needs and priorities identified for the Backus Hospital focus area:

The ECHC meets regularly to work together to address community health care needs with a mission of connecting people and resources to create a healthy community. Based on a prioritization survey, this group ranked obesity as the top focus area, followed closely by healthy eating and then mental health.

- As a result, the collaborative has focused on two main initiatives: (1) healthy eating and active living (HEAL) and (2) mental health and substance abuse (MH/SA). Access to care is a cross-cutting strategy across these two main initiatives.

Transportation identified as an issue for both accessing health care and for getting to work

- No public buses after 5 pm. Lack of transportation is a social determinant issue, and there is no funding to fix public transportation
- In Norwich, the Rose City Senior Center is a membership program for seniors with extensive transportation services, including shopping trips, medical transport, coordination of out-of-town (or even state) medical transport. Often work directly with physician practices to make sure patients get there.

Access to care

- Need for bilingual health counselors in community organizations. In the casino community, people have trouble communicating, language and cultural barriers are prevalent, casino money from the state not going back into the community (goes to Hartford)
- Overuse of the ED, need to address high-risk patients with better care coordination
- Gaps in primary care, including behavioral health services and vaccinations
- Need to create a higher value health care system: healthcare cost is wasted, duplication of services, dislocation of services, poor coordination, healthcare expenses take away from other services
- Cost of insuring employees has increased significantly. Individuals are paying more for health insurance and are facing high out of pocket costs
- Access to insurance, including under-insured, eligibility requirements, and undocumented with no insurance
- Lack of family services

Substance abuse issues

- Smoking still difficult to overcome and need more smoking cessation programs and awareness
- Need more treatment options for opioid abuse (as opposed to criminalization)
- Need detox centers
- Not enough data on the opioid issue

Mental health issues

- Need for more youth based mental health programs
- Mental health patients get dumped in the ED — more and more are not able to be medically and behaviorally handled
- Shortage of psychiatrists, difficult to recruit based on comparatively lower pay

Access to healthy food

- Identified as a top issue. Need for better access to and greater consumption of fruits and vegetables. Inconsistent funding for programs.
- High cost of healthy food, need for more voucher programs, and increasing focus on food donation
- Need better food education

In the region, geographically Norwich and Griswold scored significantly worse in healthy weight indicators

- Most cities in the region also had higher rates of arthritis

Lack of coordination among and between providers and community-based organizations limits the overall effectiveness of the programs that are going to help serve the populations most in need

- Need community educational events as part of preventive care
- Need to enhance high-risk care coordination team for individuals who frequent ED services: should include medical weight-loss program and chronic-disease programs

HEALTHY PEOPLE 2020 KEY BENCHMARKS AND METRICS

The following table highlights some of the service area's key health metrics as compared to the State of Connecticut and the Healthy People 2020 targeted benchmarks. The indicators shown in the table below reflect data from the Connecticut Department of Health's Local Analysis.

Green text indicates metrics that are better than the Healthy People 2020 benchmark, and red text indicates metrics that are worse than the Healthy People 2020 benchmark. The service area and the State of Connecticut have the same indicators that are above and below the Healthy People 2020 benchmarks.

	SERVICE AREA	STATE OF CONNECTICUT	HEALTHY PEOPLE 2020
HEALTH STATUS INDICATORS			
Good Physical Health	84.1%	84.6%	79.8%
Good Mental Health	83.1%	84.0%	80.1%
Healthy Weight	35.2%	38.6%	33.9%
HEALTH RISK BEHAVIORS			
No Leisure Time or Physical Activity	23.2%	23.2%	32.6%
Current Cigarette Smoking	17.3%	15.3%	12.0%
Excessive Alcohol Consumption	18.4%	18.9%	25.4%
HEALTH PROTECTIVE BEHAVIORS			
Influenza Vaccination	43.5%	41.9%	90.0%
Pneumococcal Vaccination	71.7%	70.1%	90.0%
HIV Test	34.0%	35.6%	73.6%

LOCAL AREA INDICATORS

SELECTED LOCAL AREAS

In order to understand population health behaviors and indicators at a more granular level, metrics were retrieved from the Connecticut Department of Health based on their 53 local area definitions based on county subdivisions, with selected area definitions highlighted in the table below.

Backus Hospital
Selected Local Areas

Local Area/Included Cities and Towns	Label
12 - Groton, New London	New London
13 - Chester, Colchester, Durham, East Haddam, East Hampton, Haddam, Hebron, Marlborough, Middlefield, Portland	East Haddam
14 - Killingly, Plainfield, Putnam, Sterling, Thompson	Killingly
19 - East Lyme, Ledyard, Waterford	East Lyme
25 - Bozrah, Lebanon, North Stonington, Salem, Stonington	Stonington
44 - Brooklyn, Canterbury, Eastford, Hampton, Pomfret, Union, Woodstock	Brooklyn
47 - Norwich	Norwich
48 - Franklin, Griswold, Lisbon, Montville, Preston, Sprague, Voluntown	Griswold
53 - Windham	Windham

Source: Connecticut Department of Public Health

LOCAL HEALTH INDICATOR DEFINITIONS

The following table provides definitions for each of the local health indicators.

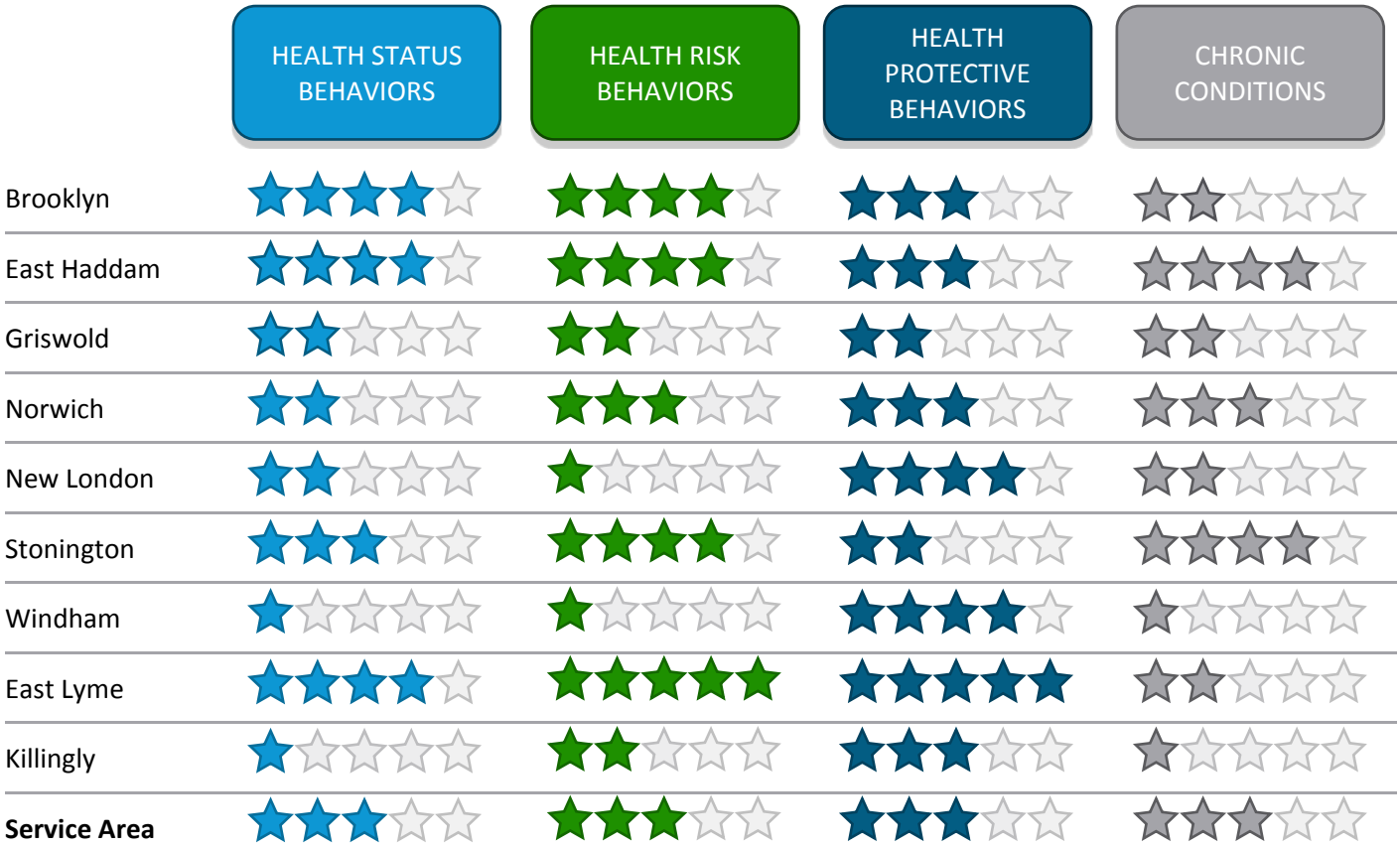
Health Indicator Definitions

Health Indicator	Definition
Health Status Indicators	
Good or Better General Health (% of Adults)	General health categorized as "Good", "Very Good", or "Excellent"
Good Physical Health (% of Adults)	Less than 14 days in the last 30 days where their physical health was not good
Good Mental Health (% of Adults)	Less than 14 days in the last 30 days where their mental health was not good
Healthy Weight (% of Adults)	Body-mass index between 18.5 and 25.0
Health Risk Behaviors	
No Leisure Time or Physical Activity (% of Adults)	No participation in any physical activities or exercise, outside of work, in the last 30 days
Current Cigarette Smoking (% of Adults)	Smoke cigarettes every day or some days
Excessive Alcohol Consumption (% of Adults)	Classified as a heavy or binge drinker. Heavy drinking is defined as at least three drinks daily for men or at least two drinks daily for women. Binge drinking is defined as six or more drinks during one occasion for men, or five or more drinks per occasion for women.
Health Protective Behaviors	
Routine Check-Ups (% of Adults)	Visited a doctor for a routine checkup in the past two years
Influenza Vaccination (% of Adults)	Received a flu shot or vaccine within the last year
Pneumococcal Vaccination (% of Adults Aged 65+)	Received a pneumonia short or vaccine in their lifetime
HIV Test (% of Adults Aged 18-64)	Tested for HIV in their lifetime
Chronic Conditions	
Current Asthma (% of Adults)	Diagnosed with asthma
Arthritis (% of Adults)	Diagnosed with arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia
Diabetes (% of Adults)	Diagnosed with diabetes
Depression (% of Adults)	Diagnosed with a depressive disorder
Chronic Obstructive Pulmonary Disease (% of Adults)	Diagnosed with COPD, emphysema, or chronic bronchitis
Cardiovascular Disease (% of Adults)	Diagnosed with a heart attack, myocardial infarction, angina, coronary heart disease, or stroke

Source: Connecticut Department of Public Health

SUMMARY OF LOCAL INDICATORS

The following chart outlines health indicators by local area as compared to the State of Connecticut. Scores range from one to five stars, from significantly worse to significantly better than the State of Connecticut, respectively.



DETAILED LOCAL INDICATORS

The following table provides additional detail for each local area's health indicator.

Health Indicators and Behaviors
Prevalence as a Percent of Adult Population

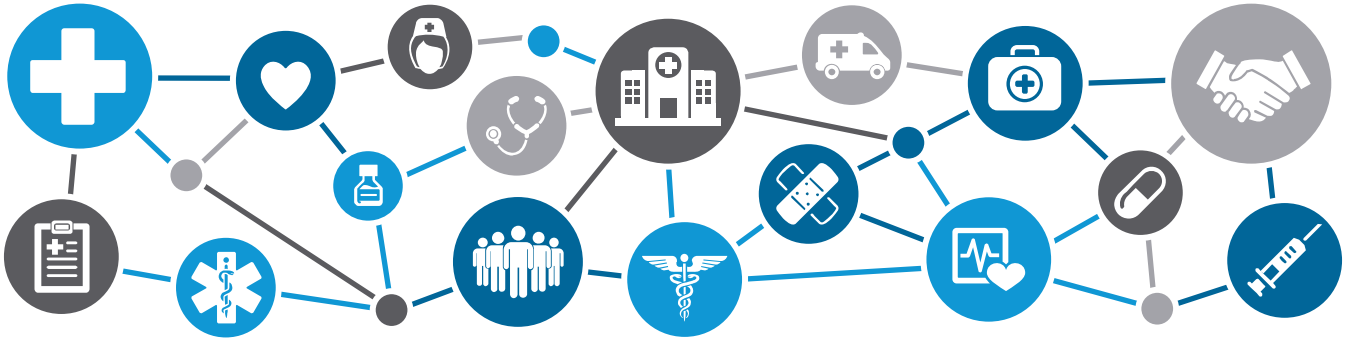
Health Indicator	Local Area									Backus Service Area	State of Connecticut
	New London	East Haddam	Killingly	East Lyme	Stonington	Brooklyn	Norwich	Griswold	Windham		
Health Status Indicators											
Good or Better General Health	83.0%	90.7%	81.1%	89.2%	87.8%	90.7%	83.4%	88.1%	77.7%	86.2%	85.6%
Good Physical Health	84.2%	87.4%	80.1%	83.4%	86.7%	88.2%	82.9%	83.6%	76.8%	84.1%	84.6%
Good Mental Health	76.0%	85.1%	83.5%	84.6%	87.1%	84.5%	83.7%	85.8%	78.3%	83.1%	84.0%
Healthy Weight	38.5%	37.8%	30.0%	36.3%	39.2%	39.6%	28.5%	30.0%	36.0%	35.2%	38.6%
Health Risk Behaviors											
No Leisure Time or Physical Activity	29.0%	20.5%	25.1%	16.1%	16.3%	20.6%	28.5%	24.2%	31.0%	23.2%	23.2%
Current Cigarette Smoking	23.4%	11.7%	21.1%	9.6%	13.9%	16.1%	27.0%	16.6%	21.1%	17.3%	15.3%
Excessive Alcohol Consumption	18.9%	20.0%	19.1%	13.6%	20.3%	14.2%	14.5%	24.8%	17.2%	18.4%	18.9%
Health Protective Behaviors											
Routine Check-Ups	89.8%	85.5%	84.7%	90.4%	88.5%	88.7%	86.9%	87.0%	82.0%	87.2%	86.8%
Influenza Vaccination	38.8%	47.8%	44.0%	50.8%	43.8%	41.7%	39.8%	40.8%	37.8%	43.5%	41.9%
Pneumococcal Vaccination	74.9%	71.8%	75.0%	78.0%	65.3%	75.7%	66.5%	66.9%	65.0%	71.7%	70.1%
HIV Test	45.9%	29.3%	33.2%	30.4%	27.8%	30.5%	38.5%	27.8%	45.3%	34.0%	35.6%
Chronic Conditions											
Current Asthma	11.9%	13.4%	12.2%	11.5%	5.0%	13.2%	11.4%	11.2%	14.4%	11.7%	9.8%
Arthritis	22.5%	23.8%	30.2%	28.6%	26.7%	29.8%	27.9%	28.7%	24.7%	26.6%	23.9%
Diabetes	7.9%	6.9%	13.9%	8.0%	7.5%	11.7%	11.1%	10.6%	10.0%	9.4%	9.1%
Depression	22.8%	13.4%	20.7%	17.1%	13.8%	18.5%	20.0%	18.5%	29.6%	18.7%	17.2%
Chronic Obstructive Pulmonary Disease	6.9%	4.8%	9.4%	6.0%	5.0%	10.0%	9.1%	9.2%	5.0%	7.1%	5.5%
Cardiovascular Disease	6.7%	8.0%	8.6%	8.2%	10.1%	8.6%	7.7%	7.0%	5.0%	7.8%	7.3%

Source: Connecticut Department of Public Health

Significantly Better Than State Average

Significantly Worse Than State Average

COMMUNITY DEFINITION AND OVERVIEW



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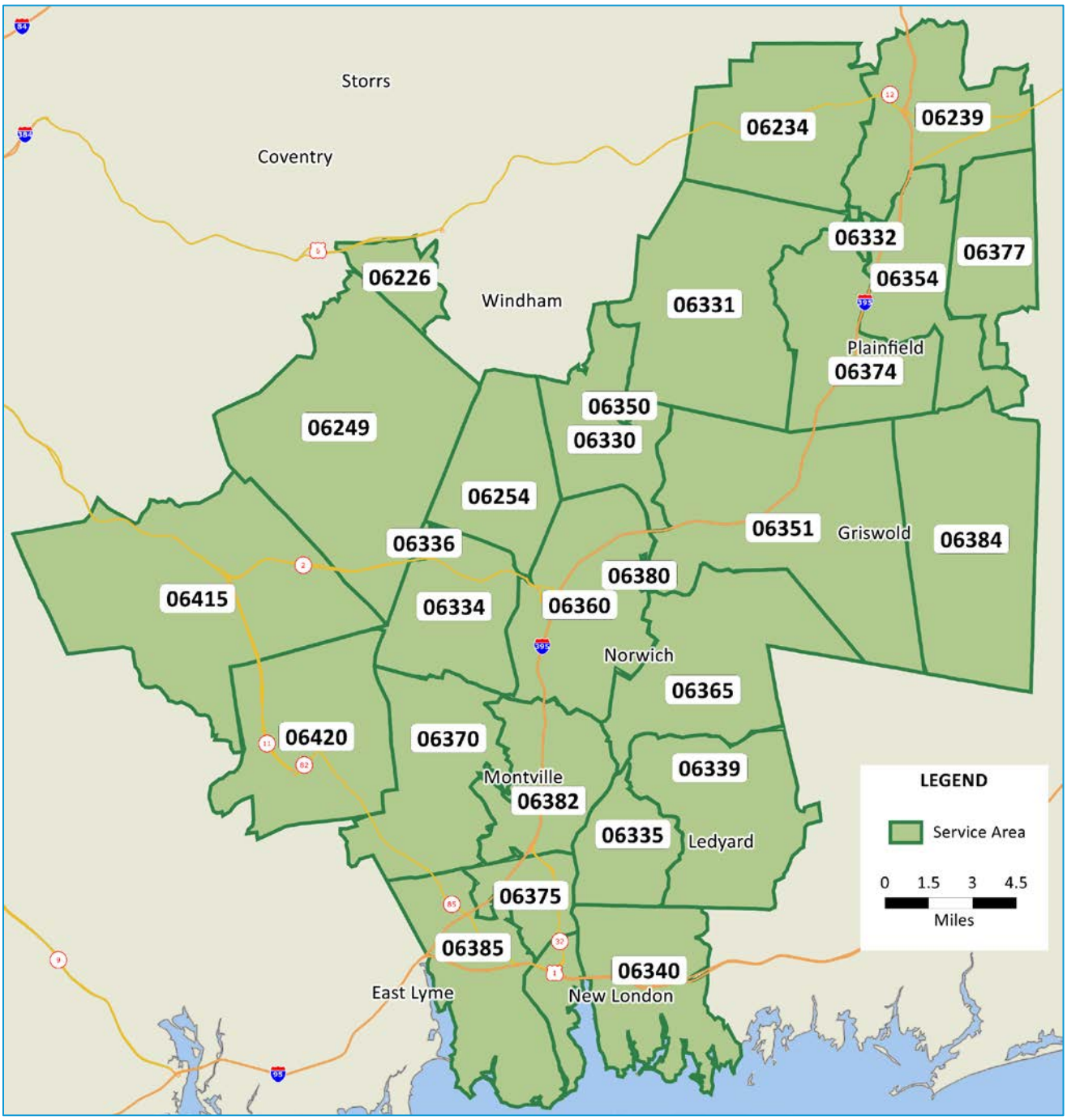
SERVICE AREA DEFINITION

The Hospital's service area definition was provided by Hartford HealthCare and is defined by the 31 ZIP Codes highlighted on the map below. When available, information relating to these specific ZIP Codes was integrated into this report.



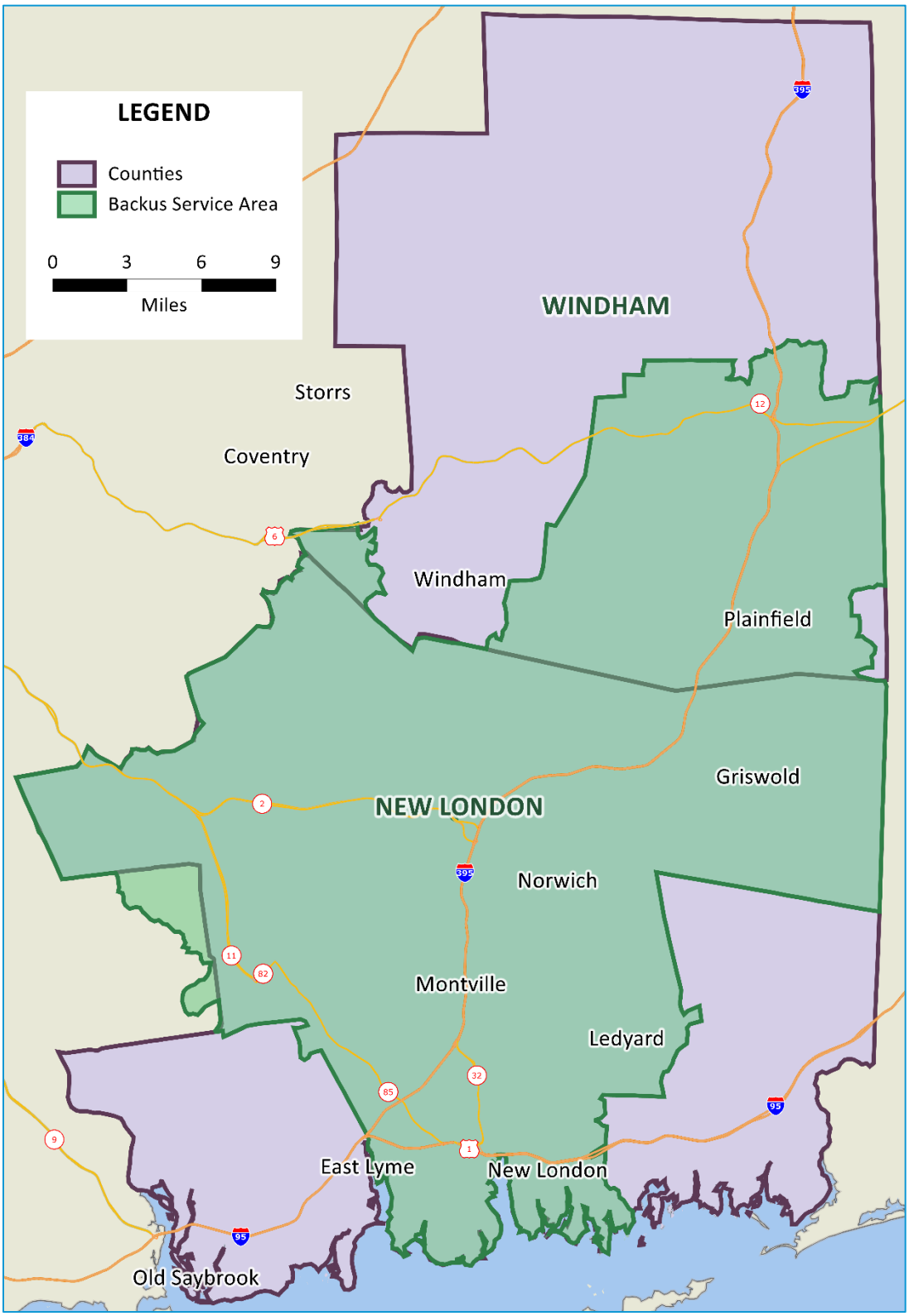
The following table outlines the ZIP Codes that comprise the Hospital's service area definition as provided by Hartford HealthCare.

Backus Hospital
Service Area Definition

ZIP Code	City	State	ZIP Code	City	State
06226	Willimantic	CT	06353	Montville	CT
06234	Brooklyn	CT	06354	Moosup	CT
06239	Danielson	CT	06360	Norwich	CT
06249	Lebanon	CT	06365	Preston	CT
06254	North Franklin	CT	06370	Oakdale	CT
06320	New London	CT	06374	Plainfield	CT
06330	Baltic	CT	06375	Quaker Hill	CT
06331	Canterbury	CT	06377	Sterling	CT
06332	Central Village	CT	06380	Taftville	CT
06334	Bozrah	CT	06382	Uncasville	CT
06335	Gales Ferry	CT	06384	Voluntown	CT
06336	Gilman	CT	06385	Waterford	CT
06339	Ledyard	CT	06387	Wauregan	CT
06340	Groton	CT	06415	Colchester	CT
06350	Hanover	CT	06420	Salem	CT
06351	Jewett City	CT			

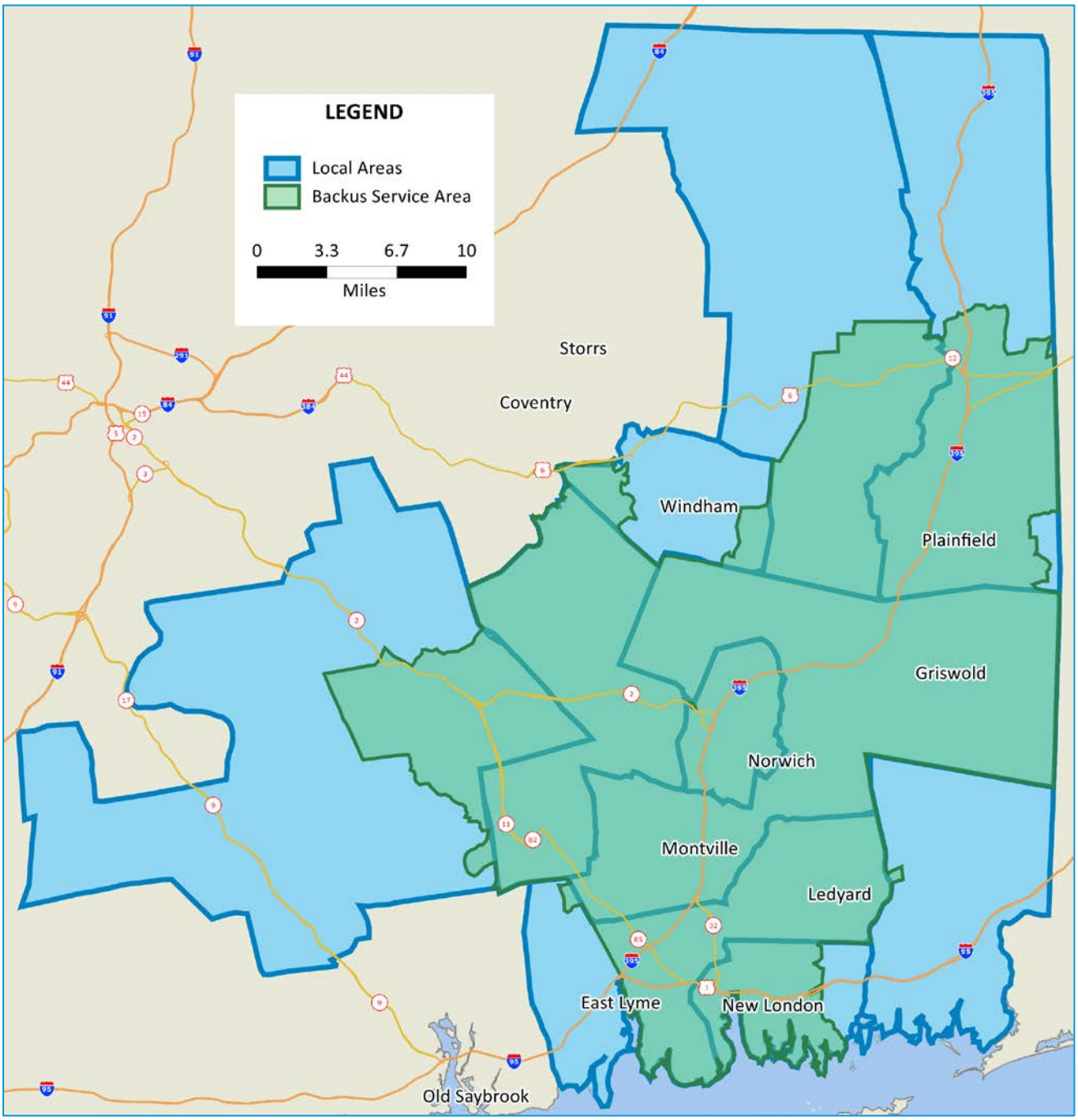
SELECTED COUNTIES

The Hospital's service area spans across New London County and Windham County. Due to limited data available at the ZIP Code level, when appropriate, key information and metrics were calculated and assessed for these three counties, which are highlighted in green in the map below.



CONNECTICUT DEPARTMENT OF HEALTH LOCAL AREAS

In addition to county data, in order to understand population health behaviors and indicators at a more granular level, metrics were retrieved from the Connecticut Department of Health based on their 53 local area definitions based on county subdivisions. Health indicators for the local areas highlighted in blue in the map below were assessed in aggregate and are incorporated into this report.



POPULATION GROWTH AND AGE DISTRIBUTION

Overall, the service area population is expected to remain flat over the next five years, which is comparable to the State of Connecticut in total. However, similar to national trends, the population is projected to shift towards residents aged 65 and older.

Demographic Summary

Age Group	Population 2017	Population 2022	Percent Change	Distribution (%) 2017	Distribution (%) 2022
Service Area					
0 - 17	56,168	53,739	-4.3%	20.6%	19.8%
18 - 44	100,378	98,492	-1.9%	36.8%	36.3%
45 - 64	74,530	71,260	-4.4%	27.3%	26.2%
65+	42,039	48,109	14.4%	15.4%	17.7%
Total/Overall	**273,115**	**271,600**	**-0.6%**	**100.0%**	**100.0%**
State of Connecticut					
0 - 17	749,574	711,393	-5.1%	20.9%	19.7%
18 - 44	1,224,277	1,227,332	0.2%	34.1%	34.1%
45 - 64	1,024,279	985,413	-3.8%	28.5%	27.3%
65+	592,007	679,504	14.8%	16.5%	18.9%
Total/Overall	**3,590,137**	**3,603,642**	**0.4%**	**100.0%**	**100.0%**

Source: The Nielsen Company

ETHNICITY BREAKDOWN

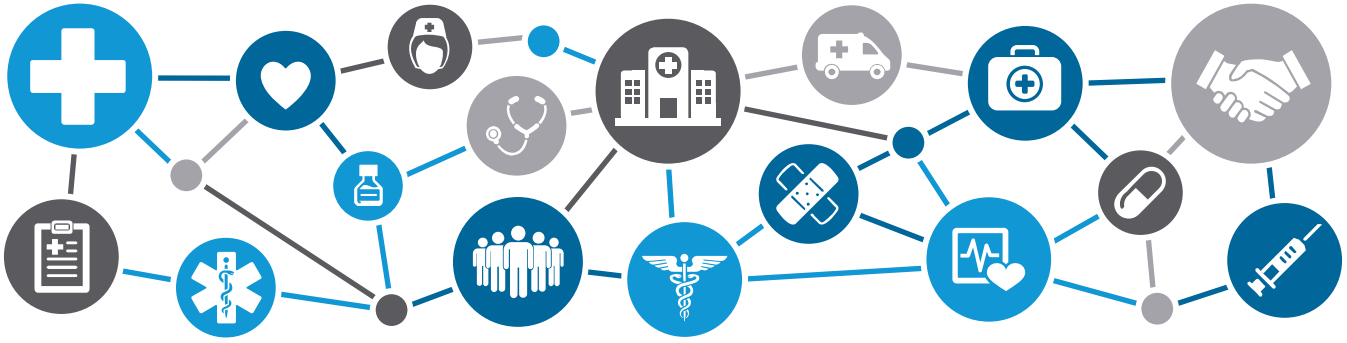
While the total population is expected to remain flat, both the service area and the State of Connecticut are projected to see an increase in Hispanic, black, and other ethnicities, and a decrease in residents who identify as white.

Ethnic Summary

Ethnicity	Population 2017	Population 2022	Percent Change	Distribution (%) 2017	Distribution (%) 2022
Service Area					
White	197,002	187,802	-4.7%	72.1%	69.1%
Hispanic	35,285	40,410	14.5%	12.9%	14.9%
Black	18,454	19,833	7.5%	6.8%	7.3%
Other	22,374	23,555	5.3%	8.2%	8.7%
Total/Overall	**273,115**	**271,600**	**-0.6%**	**100.0%**	**100.0%**
State of Connecticut					
White	2,400,758	2,293,789	-4.5%	66.9%	63.7%
Hispanic	544,952	614,281	12.7%	15.2%	17.0%
Black	389,366	409,438	5.2%	10.8%	11.4%
Other	255,061	286,134	12.2%	7.1%	7.9%
Total/Overall	**3,590,137**	**3,603,642**	**0.4%**	**100.0%**	**100.0%**

Source: The Nielsen Company

SOCIAL DETERMINANTS OF HEALTH



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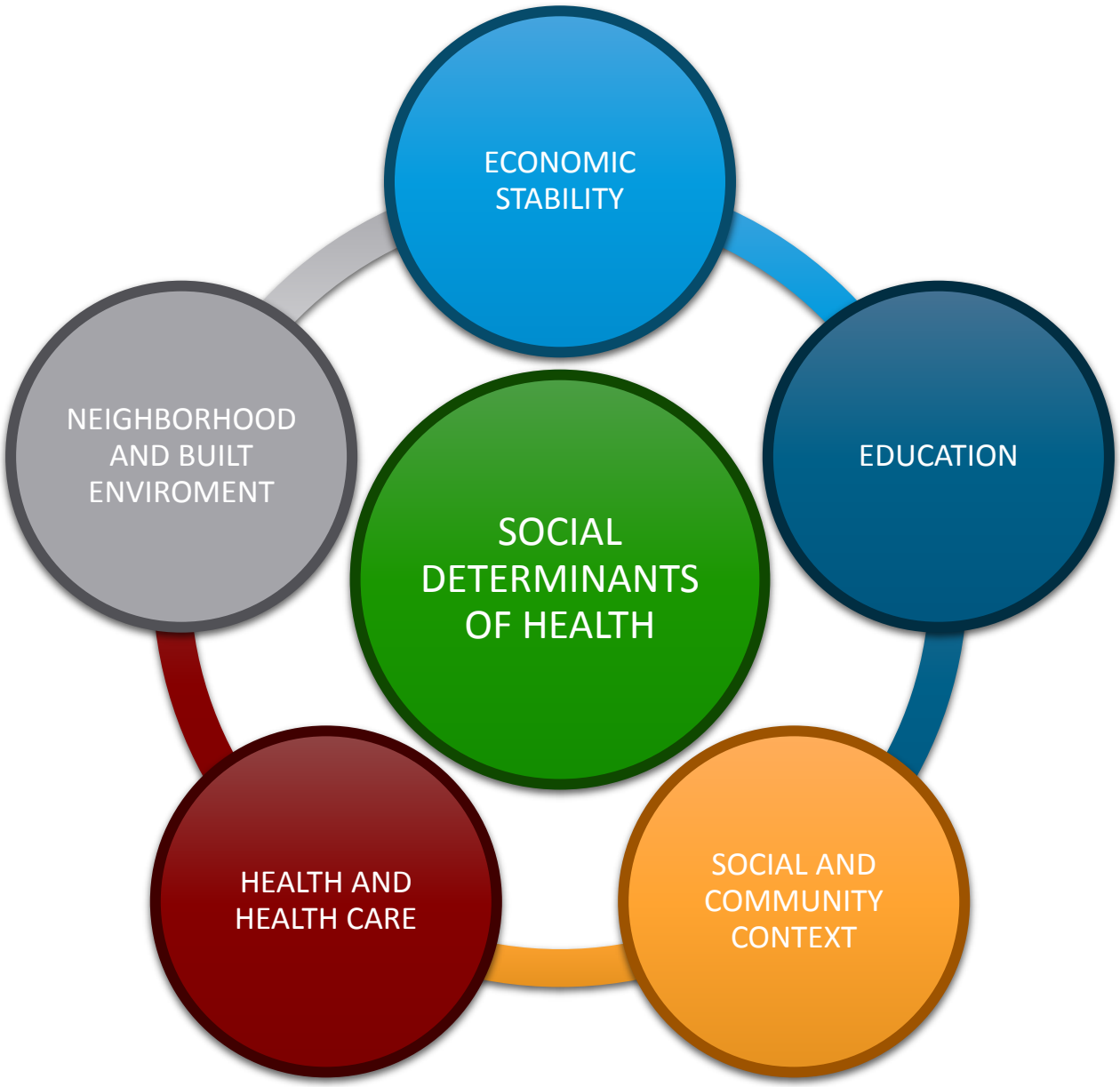
OVERVIEW

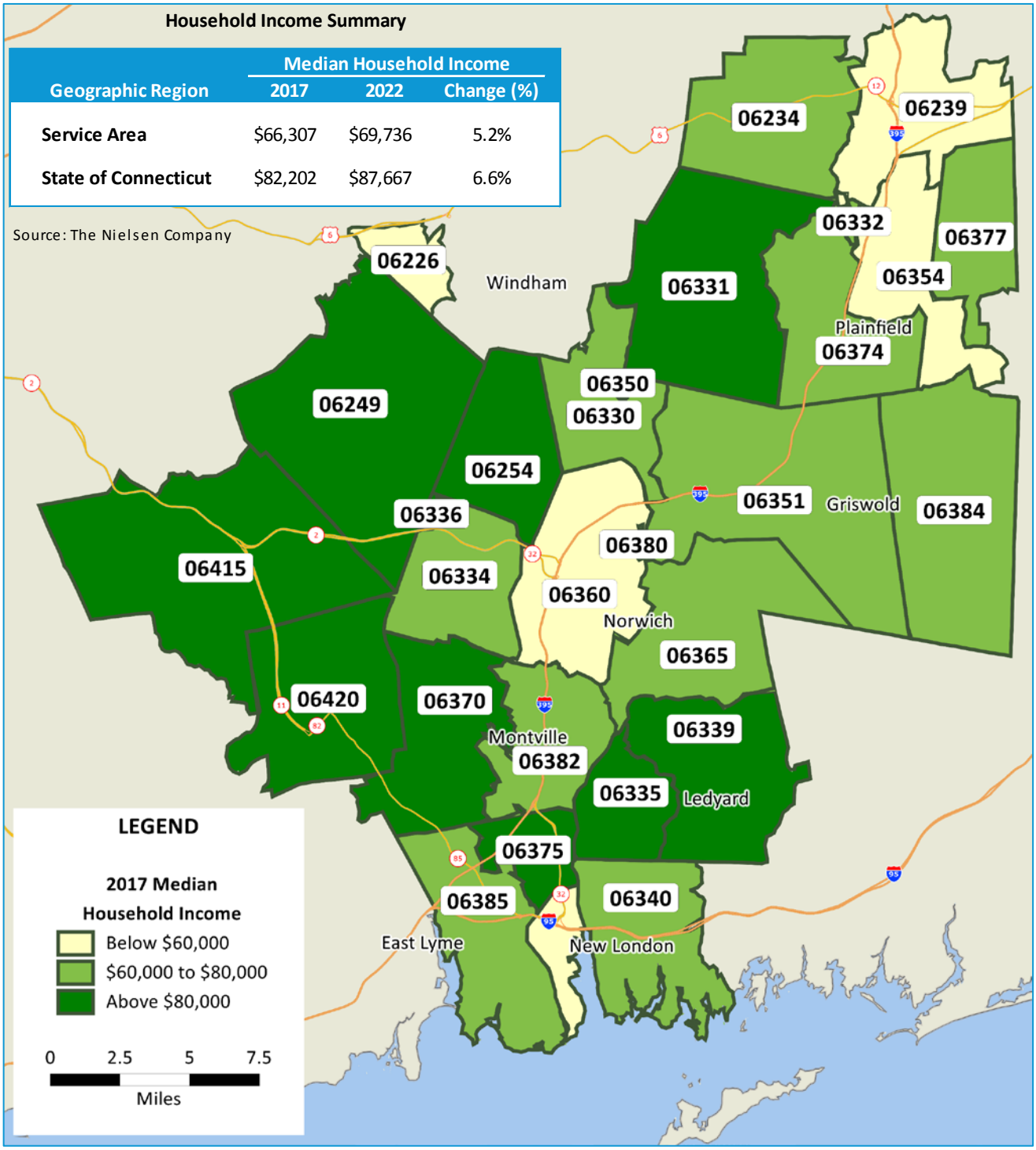
Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as "place." In addition to the more material attributes of "place," the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins. (HealthyPeople.gov)



ECONOMIC STABILITY

MEDIAN HOUSEHOLD INCOME

While the service area has a lower median household income compared to the State of Connecticut, there is a concentration of high-income households in the western ZIP Codes.



POVERTY METRICS

The poverty rate is lower than the State of Connecticut in New London County and higher in Windham County. However, both counties and the State of Connecticut have lower poverty rates than the United States overall.

Poverty Metrics

Percent Below Poverty Line	New London County	Windham County	State of Connecticut	United States
Ethnicity				
White	8.0%	9.6%	7.8%	12.4%
Black	21.4%	19.1%	20.3%	26.2%
Hispanic	25.8%	35.2%	24.5%	23.4%
Total/Overall	**9.9%**	**11.2%**	**10.4%**	**15.1%**
Male	8.8%	9.5%	9.4%	13.8%
Female	10.9%	12.9%	11.3%	16.3%

Source: American Community Survey

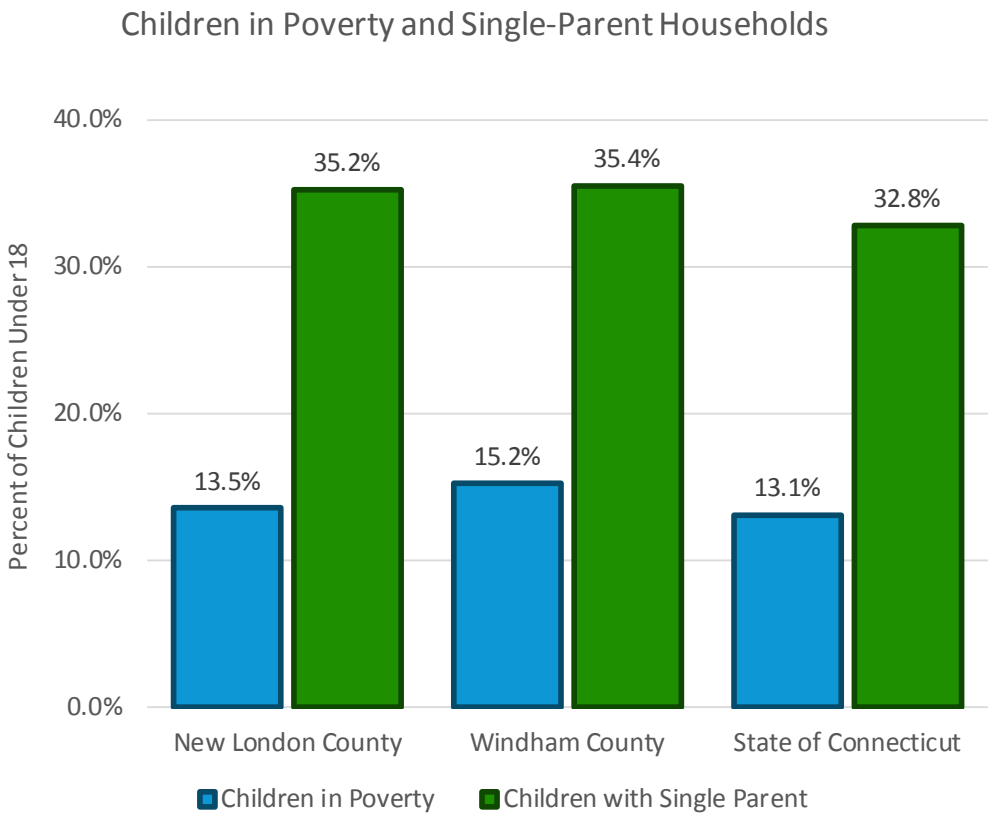
KEY INFORMANT COMMENTS ON POVERTY

Poverty is the top social determinant of community health issues in our area

In this area, there are lots of poor people, and one needs to make $18/hr to afford to live, but many people don't, so poverty a huge issue

CHILDREN IN POVERTY AND SINGLE-PARENT HOUSEHOLDS

The percentage of children living in poverty and single-parent households is higher than the State of Connecticut in New London and Windham counties, and this trend appears in the percent of children living in single-parent households as well.



Source: County Health Rankings

HOMEOWNERSHIP RATES

The distribution of home ownership and renters within the service area is comparable to the State of Connecticut and is projected to remain consistent through 2022.

Home Ownership Rates

Geographic Region	Percent of Households		
	2017	2022	Variance
Service Area			
Owner	64.1%	63.9%	-0.1%
Renter	35.9%	36.1%	0.1%
Total/Overall	**100.0%**	**100.0%**	**0.0%**
State of Connecticut			
Owner	67.3%	67.2%	-0.1%
Renter	32.7%	32.8%	0.1%
Total/Overall	**100.0%**	**100.0%**	**0.0%**

Source: The Nielsen Company

KEY INFORMANT COMMENTS ON HOUSING

Housing is substandard in this area as much of it is based on old mill housing from a past era

UNEMPLOYMENT RATES

Compared to the State of Connecticut, New London has a slightly lower unemployment rate, and Windham County is slightly higher. Both counties are above the national average.

Employment Summary

Category	Unemployment Rate			
	New London County	Windham County	State of Connecticut	United States
Ethnicity [1]				
White	7.0%	8.1%	6.7%	6.3%
Black	14.0%	8.7%	14.6%	13.3%
Hispanic	12.9%	13.6%	11.9%	8.7%
Total/Overall	**7.7%**	**8.4%**	**8.0%**	**7.4%**
Male [2]	7.5%	8.8%	7.8%	7.0%
Female [2]	7.5%	6.6%	6.9%	6.7%

Source: American Community Survey

[1] Population aged 16 or older

[2] Population aged 20 to 64

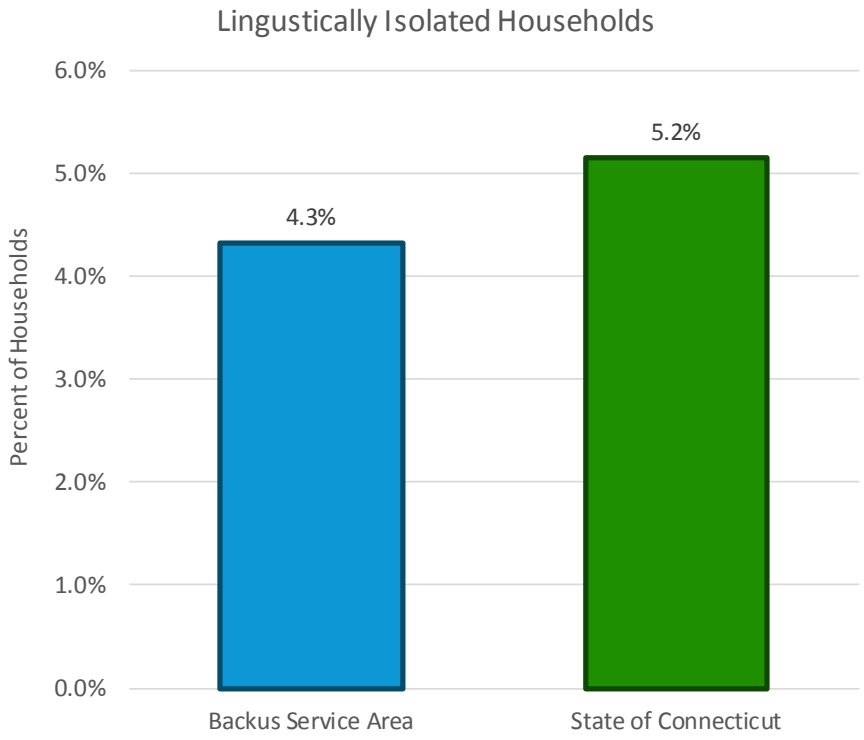
KEY INFORMANT COMMENTS ON WORKFORCE

One of the biggest issues in the community is workforce — we don't have an adequate workforce, and we don't have the technology to help with distances involved with care sites

EDUCATION AND LANGUAGE

LINGUISTICALLY ISOLATED POPULATION

Compared to the State of Connecticut, the service area has a slightly lower percentage of households that are considered linguistically isolated. These households are defined by all members 14 years old and over having some difficulty speaking English.



Source: County Health Rankings

KEY INFORMANT COMMENTS ON LANGUAGE

When providers are counseling patients, patients comment that they don't understand why they got bills, and why can't someone explain to them in Spanish what is going on? Literacy is a serious issue in the community as well

EDUCATIONAL METRICS

Compared to the State of Connecticut, the average level of educational attainment is lower in the service area, with lower proportions of residents who have earned a bachelor's degree or higher.

Educational Attainment

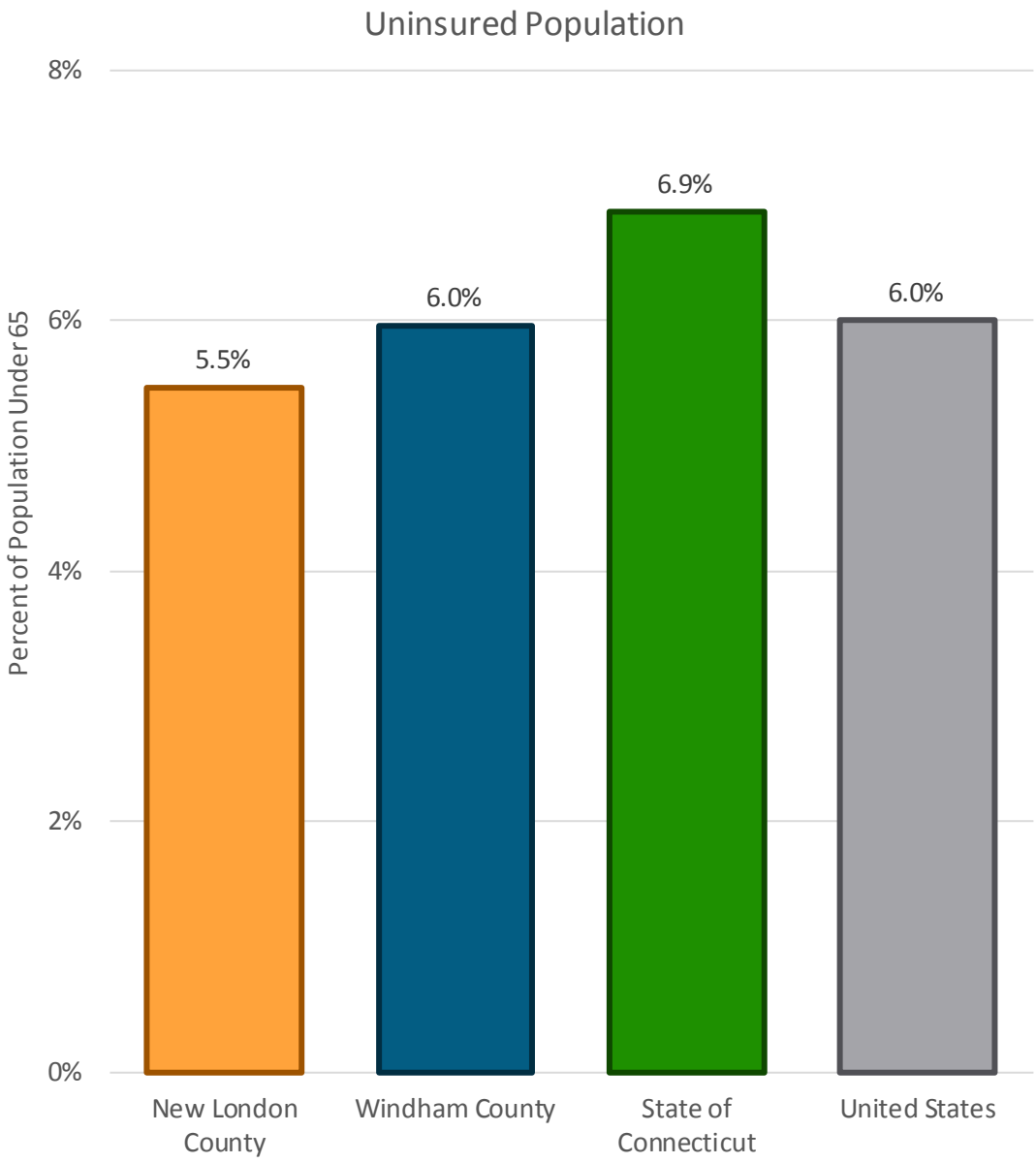
Level of Attainment	Service Area	State of Connecticut
No High School Diploma	10.6%	9.9%
High School Graduate	34.0%	27.3%
Some College	21.3%	17.3%
Associate's Degree	8.5%	7.5%
Bachelor's Degree	14.8%	21.3%
Graduate Degree	10.8%	16.8%
Total/Overall	**100.0%**	**100.0%**

Source: American Community Survey

HEALTH AND HEALTH CARE

UNINSURED POPULATION

Compared to the State of Connecticut, both counties have a lower percentage of uninsured residents, with New London County exceeding the top 10th percentile of counties nationwide.



Source: County Health Rankings

INSURANCE COVERAGE

Of the service area's residents who received inpatient care in 2017, approximately 75% of the patient days were covered by governmental coverage (Medicaid/Medicare), which is comparable to the State of Connecticut. However, from an emergency room perspective, the percentage of Medicaid coverage is significantly higher for both the service area and the State of Connecticut, which is expected as these patients are often the highest users of emergency services.

Insurance Coverage Estimates

Payer Category	Service Area	State of Connecticut
Inpatient Days		
Private	20.3%	22.6%
Medicare	51.9%	50.4%
Medicaid	23.0%	24.2%
Other	2.9%	0.9%
Uninsured	1.9%	1.9%
Total/Overall	**100.0%**	**100.0%**
Emergency Room Visits (Non-Admission)		
Private	26.1%	27.6%
Medicare	19.1%	18.8%
Medicaid	43.0%	44.2%
Other	6.0%	2.3%
Uninsured	5.8%	7.1%
Total/Overall	**100.0%**	**100.0%**

Source: Connecticut Hospital Association

KEY INFORMANT COMMENTS ON INSURANCE

For patients on the margins, you have to get sick and lose money before eligibility kicks in to get care

The fiasco with Anthem and fiasco with United have caused major issues — large payers like that are having issues — it is not about patient care anymore

People undocumented have no insurance

ACCESS TO HEALTH CARE PROVIDERS

Access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans. This topic area focuses on 3 components of access to care: insurance coverage, health services, and timeliness of care. When considering access to health care, it is important to also include oral health care and obtaining necessary prescription drugs. (HealthyPeople.gov)

Both counties have fewer primary care physicians, dentists, and mental health providers per person than the State of Connecticut or compared to the top 10th percentile of counties across the United States.

Clinical Provider Ratios

Population Ratio [1]	New London County	Windham County	State of Connecticut	United States
Primary Care Physicians	1,486	1,976	1,180	1,030
Dentists	1,466	2,113	1,180	1,280
Mental Health Providers	309	360	290	330

Source: County Health Rankings

[1] Number of persons per provider

KEY INFORMANT COMMENTS ON ACCESS TO PROVIDERS

Primary care is less of an access issue, but not the right kind of primary care (patients don't understand the instructions, a quick 10-minute PCP visit doesn't work)

Access to dental care a big issue, FQHC has some but just cleaning and must transfer to Farmington, but dentists don't take Medicaid (oral infections)

Primary care docs a revolving door — PCP's are retiring and not a proper hand-off because of large aging population

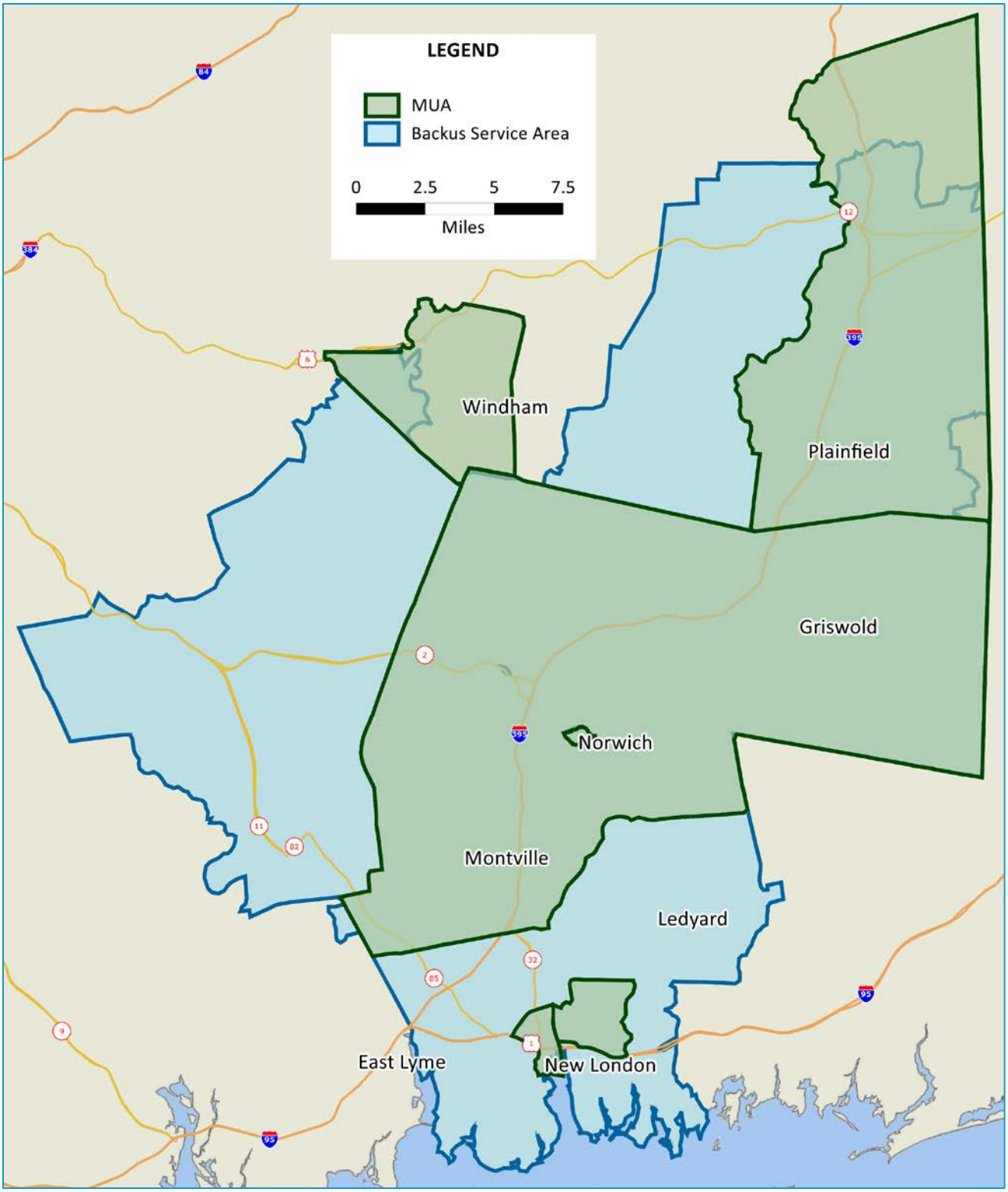
PCP's having 55-60 percent of panels which are seniors — starting to not take Medicare or Medicaid patients

People are accessing services but not coordinated care

Rural areas are tough to navigate

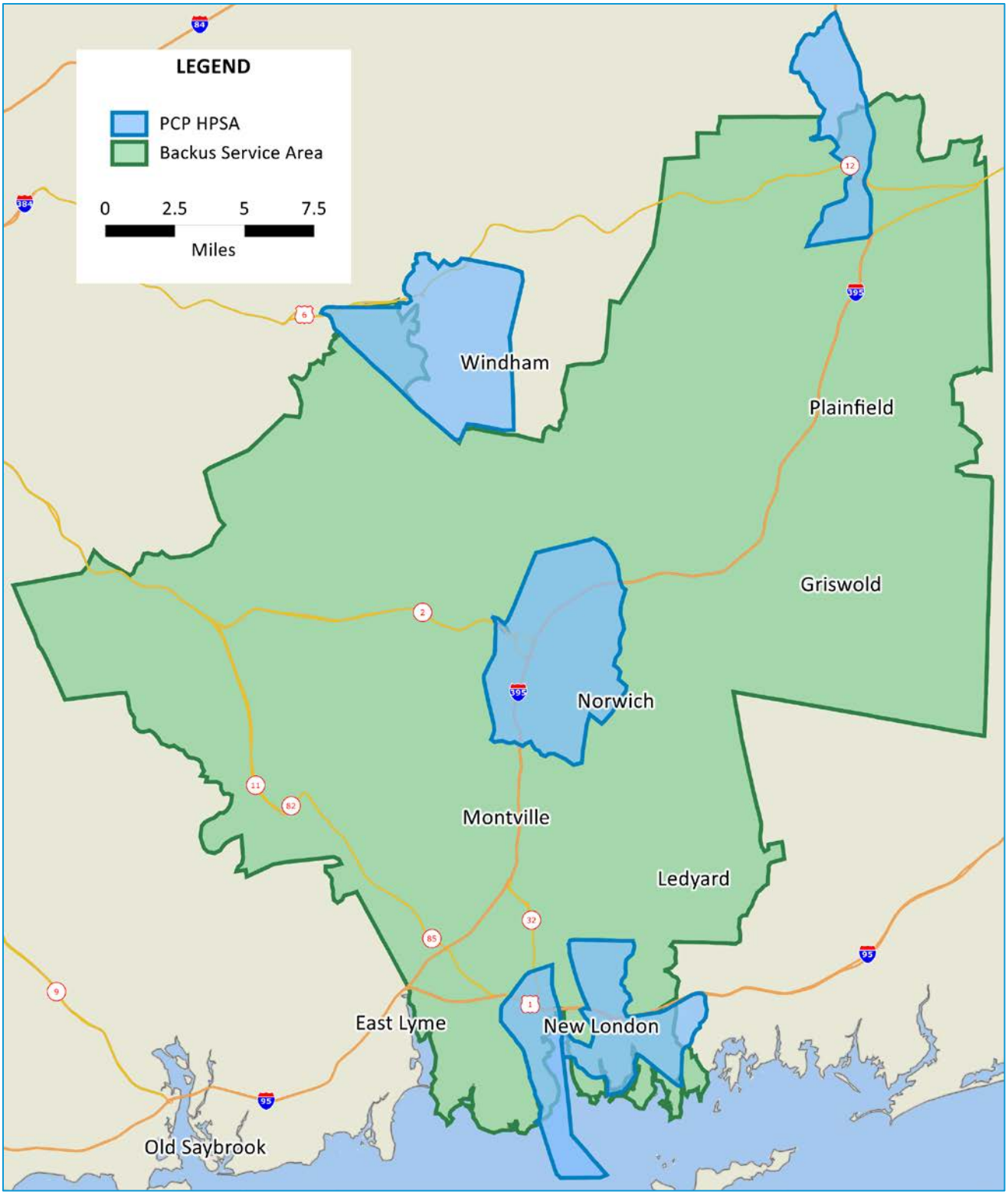
MEDICALLY UNDERSERVED AREAS

Medically Underserved Areas and Populations ("MUAs") are geographic regions designated by the Health Resources & Services Administration under the U. S. Department of Health & Human Services as having too few primary care providers, high infant mortality, high poverty or a high elderly population. As shown in the map below, there are five MUAs in the service area around Windham and Norwich, Connecticut.



HEALTH PROFESSIONAL SHORTAGE AREAS

Health Professional Shortage Areas (HPSAs) are designated by the Health Resources & Services Administration under the U. S. Department of Health & Human Services as having shortages of primary medical care, dental or mental health providers. As shown in the map below, there are three primary care HPSAs within the service area, with overlapping MUAs in Windham, Norwich, and around New London, Connecticut.



NEIGHBORHOOD AND BUILT ENVIRONMENT

CRIME AND SAFETY

Both counties have lower crime indices than the State of Connecticut and the United States. Specifically, Windham County has significantly lower crime rates. New London County has comparable burglary and larceny rates to the State of Connecticut, but lower murder, robbery, and motor vehicle theft rates.

Crime Rates

Crime Rate	New London County	Windham County	State of Connecticut	United States
Rate per 100,000 Persons				
Murder	1.1	3.5	2.2	5.3
Rape	24.2	25.3	21.7	40.4
Robbery	29.4	23.5	75.7	102.8
Aggravated Assault	140.3	41.9	128.1	248.5
Burglary	284.9	150.9	281.8	468.9
Larceny	1,108.5	524.1	1,333.5	1,745.0
Motor Vehicle Theft	95.1	75.0	198.5	236.9
Crime Index Total	**1,683.5**	**844.2**	**2,041.4**	**2,847.8**

Source: 2016 Annual Report of the Uniform Crime Reporting Program - State of Connecticut

PHYSICAL ENVIRONMENT

Compared to the State of Connecticut, New London and Windham counties have slightly better air pollution, and less severe housing problems, but worse food environment indices.

Physical Environment

Indicator	New London County	Windham County	State of Connecticut	United States
Air Pollution [1]	7.8	8.0	8.2	6.7
Severe Housing Problems [2]	15.4%	17.0%	19.0%	9.0%
Food Environment Index [3]	7.9	8.2	8.5	8.6

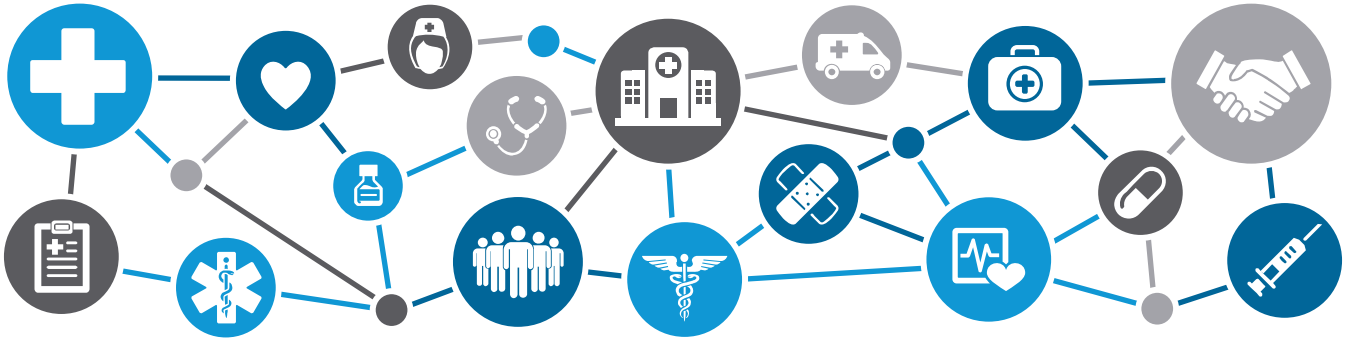
Source: County Health Rankings

[1] Average daily density of fine particulate matter in micrograms per cubic meter

[2] Percent of households with overcrowding, high housing costs, or lack kitchen/plumbing facilities

[3] Score (0 - 10) representing limited access to healthy foods

HEALTH STATUS AND BEHAVIORS



PERCIVAL
HEALTH ADVISORS

OVERALL HEALTH STATUS

The service area has slightly better physical health metrics and comparable mental health metrics to the State of Connecticut.

General Health Status Indicators

Health Indicator	Backus Service Area	State of Connecticut
General Health		
Backus Local Area Region [1]		
Good or Better General Health (% of Adults)	86.2%	85.6%
Good Physical Health (% of Adults)	84.1%	84.6%
New London County [2]		
Poor or Fair Health (% of Adults)	12.1%	14.0%
Poor Physical Health Days (Last 30 Days)	3.2	3.4
Windham County [2]		
Poor or Fair Health (% of Adults)	12.9%	14.0%
Poor Physical Health Days (Last 30 Days)	3.3	3.4
Mental Health		
Backus Local Area Region [1]		
Good Mental Health (% of Adults)	83.1%	84.0%
Depression (% of Adults)	18.7%	17.2%
New London County [2]		
Poor Mental Health Days (Last 30 Days)	3.7	3.8
Windham County [2]		
Poor Mental Health Days (Last 30 Days)	4.0	3.8

Sources:

[1] Connecticut Department of Health - Local Analysis of Selected Health Indicators - 2017

[2] Centers for Disease Control - 2016 Behavioral Risk Factor Surveillance System

KEY INFORMANT COMMENTS ON MENTAL HEALTH

Impossible to hire psychiatrists, they don't get paid enough here

Behavioral health patients treated in ER but "doped up" — an accident waiting to happen

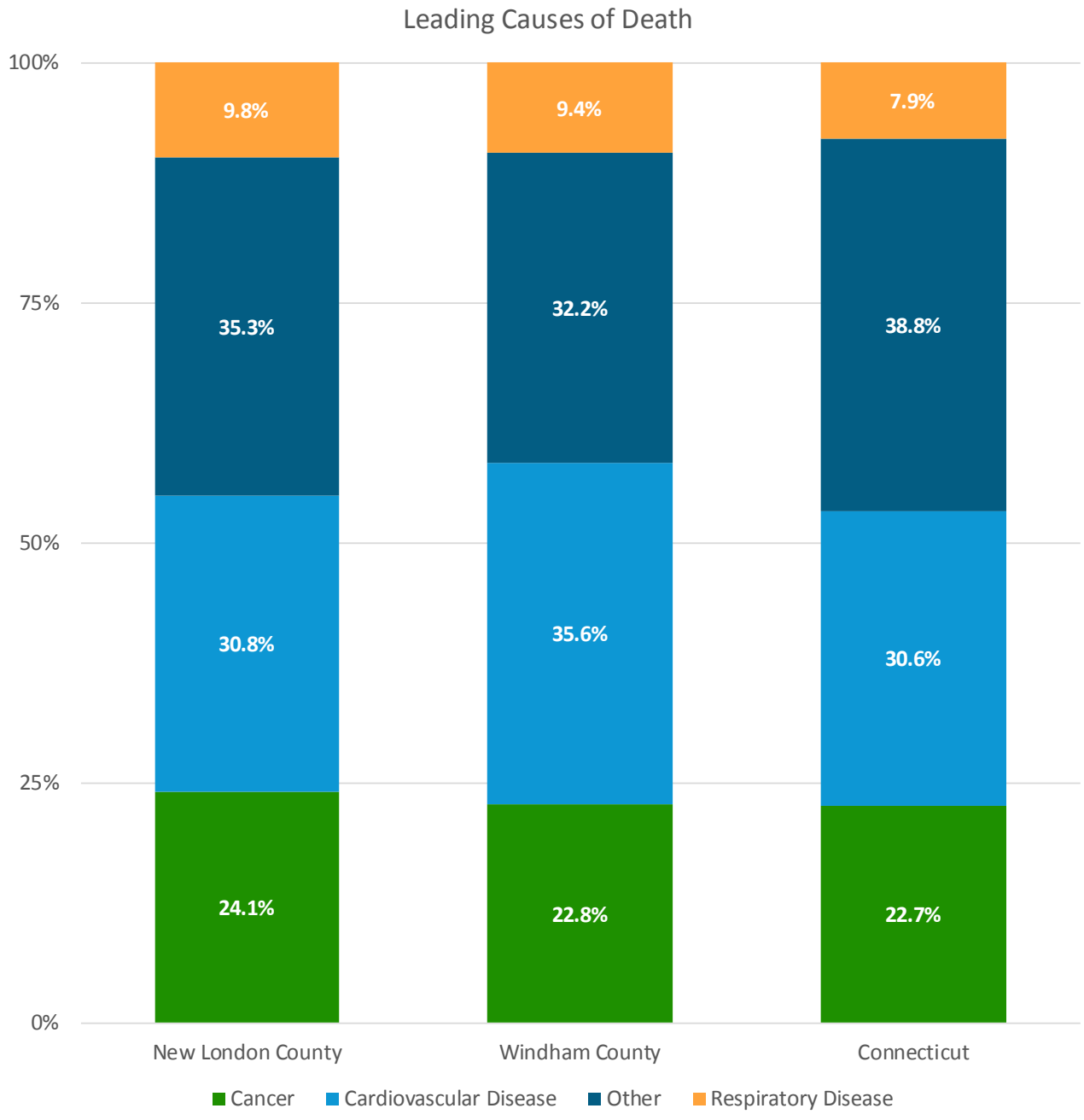
Mental health patients get dumped in the ED — more and more of these patients are not able to be medically and behaviorally handled in this setting

Finding a psychiatrist is impossible — when people go to short-term rehab, ask to stay on their caseload if they have an office because so hard to find someone. Primary care docs end up having to prescribe the medications.

Hartford HealthCare Medical Group and Natchaug doing a good job as a funnel — set up that model in other places

CHARACTERISTICS AND CAUSES OF DEATH

Similar to national and regional trends, cardiovascular disease and cancer are the largest causes of death in both counties, followed by respiratory disease. Additionally, the distribution of cause of death is similar across all geographies.



Source: CDC Wonder Online Query System

CANCER PREVALENCE AND SCREENING

Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers. Among people who develop cancer, more than half will be alive in 5 years, yet cancer remains a leading cause of death in the United States, second only to heart disease. Many cancers are preventable by reducing risk factors such as the use of tobacco products, physical inactivity, poor nutrition, obesity, and ultraviolet light exposure. Screening is effective in identifying some types of cancers in early, often highly treatable stages. For cancers with evidence-based screening tools, early detection must address the continuum of care from screening to appropriate follow-up of abnormal test results and referral to cancer treatment. (HealthyPeople.gov)

New London County has slightly higher rates of cervical and lung cancer, and Windham County has a higher rate of colon and rectum cancer. However, Windham County has a significantly lower rate of prostate cancer. Windham County has the highest rates of mammograms, and New London County has the highest rate of pap tests.

Cancer Prevalence and Screening

Type of Cancer	New London County	Windham County	State of Connecticut	United States
Disease Prevalence (Per 100,000)				
Breast	142.2	131.3	139.2	123.5
Cervical	8.5	6.2	6.7	7.6
Colon and Rectum	37.5	41.6	38.8	39.8
Lung	67.3	65.7	62.1	61.2
Prostate	104.4	86.9	118.8	114.8
Screening Prevalence (Age-Adjusted %)				
Mammogram	68.6%	70.5%	67.8%	63.1%
Pap Test	82.6%	80.2%	82.1%	78.5%
Sigmoidoscopy/Colonoscopy	72.1%	73.8%	69.6%	61.3%

Source: Community Commons Health Indicators Report

CARDIOVASCULAR DISEASE

Heart disease is the leading cause of death in the United States. Stroke is the fifth leading cause of death in the United States. Together, heart disease and stroke, along with other cardiovascular disease, are among the most widespread and costly health problems facing the Nation today, accounting for approximately $320 billion in health care expenditures and related expenses annually. Fortunately, they are also among the most preventable. The leading modifiable (controllable) risk factors for heart disease and stroke are high blood pressure, high cholesterol, cigarette smoking, diabetes, unhealthy diet and physical inactivity, and obesity. (HealthyPeople.gov)

Overall, the prevalence of cardiovascular disease, high blood pressure, and high cholesterol are similar to the State of Connecticut. However, the mortality rate for heart disease is significantly higher in both counties.

Cardiovascular Disease

Health Indicator	Service Area	State of Connecticut
Backus Local Area Region [1]		
Cardiovascular Disease	7.8%	7.3%
New London County [2]		
High Blood Pressure	26.9%	25.0%
High Cholesterol	35.6%	36.3%
High Blood Pressure Management [3]	20.9%	20.6%
Health Disease Mortality [4]	151.3	101.6
Stroke Mortality [4]	31.1	27.3
Windham County [2]		
High Blood Pressure	25.2%	25.0%
High Cholesterol	38.8%	36.3%
High Blood Pressure Management [3]	15.0%	20.6%
Health Disease Mortality [4]	176.3	101.6
Stroke Mortality [4]	31.1	27.3

Sources:
[1] Connecticut Department of Health
[2] Community Commons
[3] Percent of adults needing, but not taking blood pressure medication
[3] Age-Adjusted rate per 100,000 persons

KEY INFORMANT COMMENTS ON CARDIOVASCULAR DISEASE

A flatline at HHC is cardiology — told them they would be better off having community clinics, so you don't have to struggle with no-show and translation, provide service on an outpatient basis, pay a modest amount — but that hasn't taken off

RESPIRATORY DISEASE

Asthma and chronic obstructive pulmonary disease ("COPD") are significant public health burdens. Specific methods of detection, intervention, and treatment exist that may reduce this burden and promote health.

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives.

COPD is a preventable and treatable disease characterized by airflow limitation that is not fully reversible. The airflow limitation is usually progressive and associated with an abnormal inflammatory response of the lungs to noxious particles or gases (typically from exposure to cigarette smoke). Treatment can lessen symptoms and improve quality of life for those with COPD.

Currently more than 25 million people in the United States have asthma. Approximately 14.8 million adults have been diagnosed with COPD, and approximately 12 million people have not yet been diagnosed. The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities, and states. Because of the cost to the health care system, the burden of respiratory diseases also falls on society; it is paid for with tax dollars, higher health insurance rates, and lost productivity. Annual health care expenditures for asthma alone are estimated at $20.7 billion. (HealthyPeople.gov)

The prevalence of asthma and COPD is slightly higher in the service area compared to the State of Connecticut. Additionally, the mortality rate for chronic lower respiratory disease is significantly higher in all both counties.

Respiratory Disease

Prevalence (% of Adults)	Service Area	State of Connecticut
Backus Local Area Region [1]		
Asthma	11.7%	9.8%
Chronic Obstructive Pulmonary Disease	7.1%	5.5%
Lung Disease - Mortality [2]		
New London County	40.1	15.9
Windham County	43.5	15.9

Sources:

[1] Connecticut Department of Health

[2] Community Commons - Age-adjusted rate per 100,000

DIABETES

Diabetes mellitus ("Diabetes) occurs when the body cannot produce enough insulin or cannot respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications.

Effective therapy can prevent or delay diabetic complications. However, about 28 percent of Americans with diabetes are undiagnosed, and another 86 million American adults have blood glucose levels that greatly increase their risk of developing type 2 diabetes in the next several years. Diabetes complications tend to be more common and more severe among people whose diabetes is poorly controlled, which makes this disease an immense and complex public health challenge. Preventive care practices are essential to better health outcomes for people with diabetes. (HealthyPeople.gov)

Overall, the diabetes health indicators in the service area and surrounding counties are similar to the State of Connecticut. However, New London County has a significantly lower rate of diabetes mortality than the State of Connecticut.

Diabetes

Indicator	Service Area	State of Connecticut
Backus Local Area Region		
Diabetes [1]	9.4%	9.1%
New London County		
Diabetes Monitoring [2]	83.6%	86.6%
Diabetes - Mortality [3]	7.7	14.3
Windham County		
Diabetes Monitoring [2]	88.0%	86.6%
Diabetes - Mortality [3]	N/A	14.3

Sources:

[1] Connecticut Department of Health - Percent of adults

[2] County Health Rankings - Percent of diabetic Medicare enrollees that receive HbA1c monitoring

[3] Centers for Disease Control - Age-Adjusted rate per 100,000 persons

INFECTIOUS DISEASES

The increase in life expectancy during the 20th century is largely due to improvements in child survival; this increase is associated with reductions in infectious disease mortality, due largely to immunization. However, infectious diseases remain a major cause of illness, disability, and death. Immunization recommendations in the United States currently target 17 vaccine-preventable diseases across the lifespan.

Acute respiratory infections, including pneumonia and influenza, are the 8th leading cause of death in the United States, accounting for 56,000 deaths annually. Pneumonia mortality in children fell by 97 percent in the last century, but respiratory infectious diseases continue to be leading causes of pediatric hospitalization and outpatient visits in the United States. On average, influenza leads to more than 200,000 hospitalizations and 36,000 deaths each year. The 2009 H1N1 influenza pandemic caused an estimated 270,000 hospitalizations and 12,270 deaths (1,270 of which were of people younger than age 18) between April 2009 and March 2010.

Viral hepatitis and tuberculosis can be prevented, yet health care systems often do not make the best use of their available resources to support prevention efforts. Because the U.S. health care system focuses on treatment of illnesses, rather than health promotion, patients do not always receive information about prevention and healthy lifestyles. This includes advancing effective and evidence-based viral hepatitis and tuberculosis prevention priorities and interventions. (HealthyPeople.gov)

The service area has slightly higher rates of influenza and pneumococcal vaccination, with corresponding lower rates of influenza and pneumonia mortality than the State of Connecticut. New London County has a significantly higher incidence rate of tuberculosis, and Windham County has a significantly higher incidence rate of hepatitis C.

Infectious Diseases

Health Indicator	Service Area	State of Connecticut
Backus Local Area Region [1]		
Influenza Vaccination	43.5%	41.9%
Pneumococcal Vaccination	71.7%	70.1%
New London County		
Influenza and Pneumonia - Mortality [2]	10.2	11.7
Hepatitis C [3]	43.4	39.5
Tuberculosis [3]	3.7	1.4
Windham County		
Influenza and Pneumonia - Mortality [2]	11.6	11.7
Hepatitis C [3]	86.9	39.5
Tuberculosis [3]	1.7	1.4

Sources:

[1] Connecticut Department of Health - Percent of adults

[2] Centers for Disease Control - Age-Adjusted rate per 100,000 persons

[3] Connecticut Department of Health - Rate per 100,000 persons

SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases ("STDs") refer to more than 35 infectious organisms that are transmitted primarily through sexual activity. STD prevention is an essential primary care strategy for improving reproductive health. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STDs remain a significant public health problem in the United States. This problem is largely unrecognized by the public, policymakers, and health care professionals. STDs cause many harmful, often irreversible, and costly clinical complications, such as:

- Reproductive health problems
- Fetal and perinatal health problems
- Cancer
- Facilitation of the sexual transmission of HIV infection

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 20 million new STD infections each year—almost half of them among young people ages 15 to 24.3 The cost of STDs to the U.S. health care system is estimated to be as much as $16 billion annually. Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the United States.

Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile. (HealthyPeople.gov)

Compared to the State of Connecticut, both counties have significantly lower rates of STIs, but also lower rates of HIV screenings.

Sexually Transmitted Diseases

Health Indicator	New London County	Windham County	State of Connecticut
Prevalence per 100,000 [1]			
HIV	215.0	193.3	338.7
Chlamydia	310.1	281.4	387.4
Gonorrhea	51.9	26.6	76.1
Syphilis	1.1	1.7	3.1
HIV Screenings [2]	29.5%	29.2%	35.4%

Sources:
[1] Centers for Disease Control and Prevention
[2] Community Commons

BIRTHS AND PRENATAL CARE

Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. Infant and child health are similarly influenced by sociodemographic and behavioral factors, such as education, family income, and breastfeeding, but are also linked to the physical and mental health of parents and caregivers.

Conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. Environmental and social factors such as access to health care and early intervention services, educational, employment, and economic opportunities, social support, and availability of resources to meet daily needs influence maternal health behaviors and health status. (HealthyPeople.gov)

Compared to the State of Connecticut, both counties have lower rates of low-birth-weight births and births that have no initial prenatal care. Across ethnicities, rates of low-birth weights and no initial prenatal care are similar between mothers who are white, Hispanic, or black.

Birth Statistics and Metrics

Ethnicity	Low Birth Weight [1]	No Initial Prenatal Care [2]	Percent of Live Births
New London			
White	6.6%	8.3%	19%
Hispanic	4.1%	10.0%	5%
Black	6.1%	7.7%	2%
Other	0.0%	4.5%	3%
Total/Overall	**5.5%**	**8.2%**	**100%**
Windham County [3]			
Total/Overall	**5.1%**	**11.0%**	**0%**
State of Connecticut			
White	6.5%	11.5%	54%
Hispanic	8.1%	20.9%	24%
Black	11.9%	23.2%	12%
Other	8.1%	16.4%	9%
Total/Overall	**7.7%**	**15.6%**	**100%**

Source: CDC Wonder Online Query System

[1] Percent of live births

[2] Lack of prenatal care in the first trimester

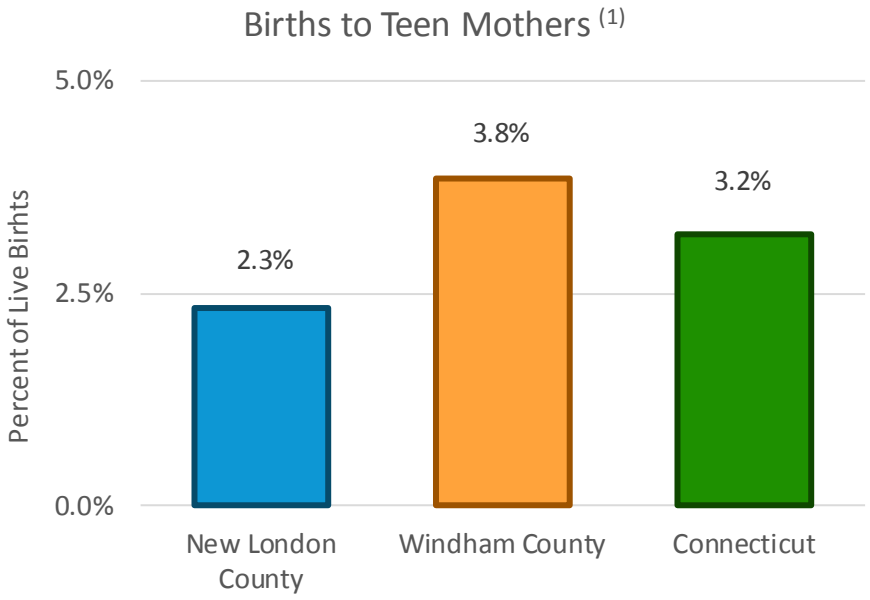
[3] Ethnicity breakdown was not available due to a small sample size

Births resulting from unintended pregnancies can have negative consequences including birth defects and low birth weight. Children from unintended pregnancies are more likely to experience poor mental and physical health during childhood, and have lower educational attainment and more behavioral issues in their teen years.

The negative consequences associated with unintended pregnancies are greater for teen parents and their children. Eighty-two percent of pregnancies to mothers ages 15 to 19 are unintended. Twenty percent of all unintended pregnancies occur among teens.

Similarly, early fatherhood is associated with lower educational attainment and lower income. The average annual cost of teen childbearing to U.S. taxpayers is estimated at $9.1 billion, or $1,430 for each teen mother per year. Moreover, children of teen parents are more likely to have lower cognitive attainment and exhibit more behavior problems. Sons of teen mothers are more likely to be incarcerated, and daughters are more likely to become adolescent mothers. (HealthPeople.gov)

Compared to the State of Connecticut, New London County has a lower proportion of teenage mothers, and Windham County has a slightly higher proportion of teenage mothers.



Source: Centers for Disease Control and Prevention

KEY INFORMANT COMMENTS ON CHILD HEALTHCARE

The region has highest % of childhood abuse in the state, a lot of trauma, the highest percentage of teen births

Northeast has woefully fewer family services, and parenting services lacking

HEALTH BEHAVIORS

Obesity - Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions. Obesity is a problem throughout the population. However, among adults, the prevalence is highest for middle-aged people and for non-Hispanic black and Mexican American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican American children and non-Hispanic black girls. The association of income with obesity varies by age, gender, and race/ethnicity.

Physical Activity - Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Regular physical activity includes participation in moderate- and vigorous-intensity physical activities and muscle-strengthening activities. More than 80% of adults do not meet the guidelines for both aerobic and muscle-strengthening activities. Similarly, more than 80% of adolescents do not do enough aerobic physical activity to meet the guidelines for youth.

Tobacco Use - Tobacco use is the largest preventable cause of death and disease in the United States. Each year, approximately 480,000 Americans die from tobacco-related illnesses. Further, more than 16 million Americans suffer from at least one disease caused by smoking. Smoking-related illness in the United States costs more than $300 billion each year, including nearly $170 billion for direct medical care for adults and more than $156 billion in lost productivity.

Substance Abuse - Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95 percent of people with substance use problems are considered unaware of their problem. Of those who recognize their problem, 273,000 have made an unsuccessful effort to obtain treatment. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders. (HealthyPeople.gov)

Compared to the State of Connecticut, the service area has a similar percentage of adults who lack leisure time or physical activity, and lower rates of adults who are at a healthy weight. The proportion of adults who smoke cigarettes is higher than the State of Connecticut.

Health Behaviors

Indicator	Service Area	State of Connecticut
Healthy Weight	35.2%	38.6%
No Leisure Time or Physical Activity	23.2%	23.2%
Current Cigarette Smoking	17.3%	15.3%
Excessive Alcohol Consumption	18.4%	18.9%

Source: Connecticut Department of Health

KEY INFORMANT COMMENTS ON HEALTHY BEHAVIORS

Smoking is a big issue

One major issue is substance abuse — for example, 28-year-old in hospital requesting heroin de-tox but cleared medically — a small number of places that are residential to take them (call 20 times to get a bed) — often discharged out of the hospital because no medical issues but will have serious de-tox issues and go back to heroin

Detox facility in this area would be huge

Access to healthy food a top issue

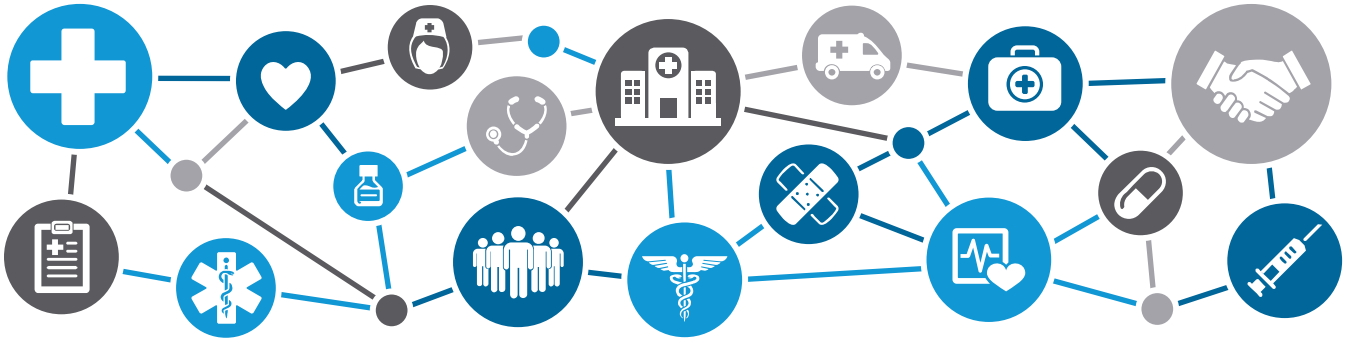
Healthy eating is a challenge for our patient population. Last health needs assessment provided UCONN dieticians (4 yrs. ago), but funding was only for a limited time

Education — resources, even do a train the trainer if you have a dietician teach and roll it out to the at-risk population

Many readmissions based on diet or diet compliance issues

Very expensive to eat healthily, need to address this. Need more funding for better eating habits.

LOCAL AREA RESOURCES



PERCIVAL
HEALTH ADVISORS

The following represent potential measures and resources (such as programs, organizations, and facilities in the community) available to address the significant health needs identified in this report. This list is not exhaustive, but rather outlines those resources identified conducting this Community Health Needs Assessment.

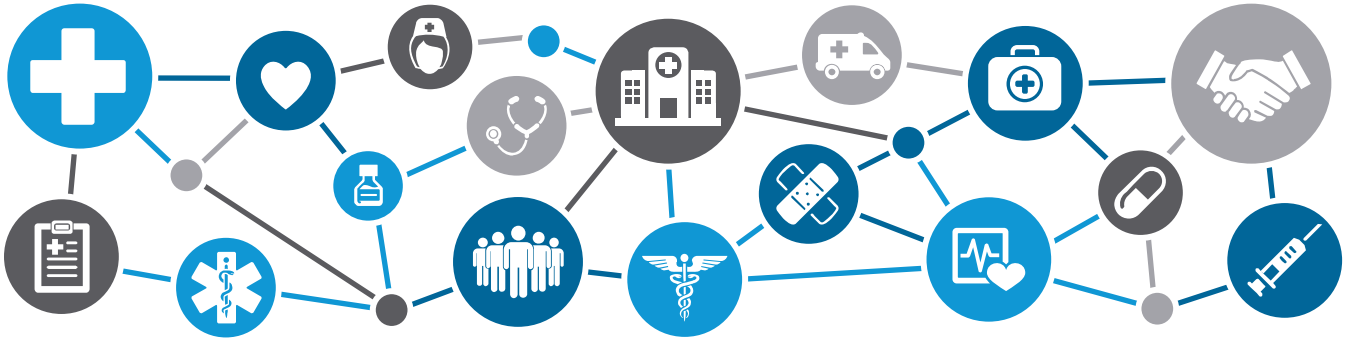
Backus Hospital
Local Area Resources

Name	Type	Address	City	State	ZIP Code
Ambulatory Surgery Centers					
Coastal Digestive Care Center	Ambulatory Surgical Center	234 Bank Street	New London	CT	06320
Constitution Surgery Center East	Ambulatory Surgical Center	174 Cross Road	Waterford	CT	06385
Eastern Connecticut Endoscopy Center	Ambulatory Surgical Center	79 Wawecus Street	Norwich	CT	06360
River Valley Ambulatory Surgery Center	Ambulatory Surgical Center	45 Salem Turnpike	Norwich	CT	06360
Community Health and Welfare					
Gateway Behavioral Health	Public Health and Welfare	165 Lawler Lane	Norwich	CT	06360
Ledge Light Health District	Public Health and Welfare	216 Broad Street	New London	CT	06320
Mohegan Tribal Health	Public Health and Welfare	13 Crow Hill Road	Uncasville	CT	06382
Northeast District Department of Health	Public Health and Welfare	69 South Main Street	Brooklyn	CT	06234
Town of Preston	Public Health and Welfare	389 Route 2	Preston	CT	06365
UNCAS Health District	Public Health and Welfare	401 West Thames Street	Norwich	CT	06360
Federally Qualified Health Centers					
Community Health Center Of Groton	Federally Qualified Health Center	333 Long Hill Road	Groton	CT	06340
Community Health Center Of New London	Federally Qualified Health Center	1 Shaws Cove	New London	CT	06320
Generations Family Health Center, Inc	Federally Qualified Health Center	330 Washington Street	Norwich	CT	06360
Generations Family Health Center, Inc	Federally Qualified Health Center	40 Mansfield Avenue	Willimantic	CT	06226
Generations Family Health Center, Inc	Federally Qualified Health Center	42 Reynolds Street	Danielson	CT	06239
United Community And Family Services, Inc	Federally Qualified Health Center	120 Plainfield Road	Moosup	CT	06354
United Community And Family Services, Inc	Federally Qualified Health Center	212 Upton Road	Colchester	CT	06415
United Community And Family Services, Inc	Federally Qualified Health Center	400 Bayonet Street	New London	CT	06320
United Community And Family Services, Inc	Federally Qualified Health Center	47 Town Street	Norwich	CT	06360
United Community And Family Services, Inc	Federally Qualified Health Center	70 Main Street	Jewett City	CT	06351
Waterford Country School	Federally Qualified Health Center	78 Hunts Brook Road	Quaker Hill	CT	06375
Hospitals					
Backus Hospital	Short Term Acute Care	326 Washington Street	Norwich	CT	06360
Lawrence + Memorial Hospital	Short Term Acute Care	365 Montauk Avenue	New London	CT	06320
Windham Hospital	Short Term Acute Care	112 Mansfield Avenue	Willimantic	CT	06226

Backus Hospital
Local Area Resources

Name	Type	Address	City	State	ZIP Code
Mental And Behavioral Health Facilities And Programs					
Child And Family Agency	Mental Health	591 Poquonnock Road	Groton	CT	06340
Child And Family Agency	Mental Health	7 Vauxhall Street	New London	CT	06320
Child And Family Agency	Mental Health	75 Granite Street	New London	CT	06320
Community Health Resources, Inc.	Mental Health and Illness	1491 West Main Street	Willimantic	CT	06226
Community Health Resources, Inc.	Mental Health and Illness	433 Valley Street	Willimantic	CT	06226
Community Health Resources, Inc.	Mental Health and Illness	55 Main Street	Norwich	CT	06360
Community Health Resources, Inc.	Mental Health and Illness	71 Westcott Street	Danielson	CT	06239
Connecticut Behavioral Health Associates	Mental Health	41 Fair Harbour Place	New London	CT	06320
Eastern Connecticut Psychological Associates	Adult Mental Health	12 Case Street	Norwich	CT	06360
Generations Family Health Center	Mental Health	322 Main Street	Willimantic	CT	06226
Perception Programs	Substance Abuse Rehabilitation Facility	54 North Street	Willimantic	CT	06226
Psychotherapy Associates Of Connecticut	Behavioral Health	244 South Main Street	Colchester	CT	06415
Reliance Health	Mental Health	40 Broadway	Norwich	CT	06360
Shoreline Counseling Group	Mental Health	616 Gold Streetar Highway	Groton	CT	06340
Sound Community Services	Mental Health	21 Montauk Avenue	New London	CT	06320
Southeastern Mental Health Authority	Adult Mental Health	401 West Thames Street	Norwich	CT	06360
Spiritual Compass Therareutic Services	Behavioral Health	124 Fort Hill Road	Groton	CT	06340
Summit Counseling	Behavioral Health	43 Swantown Road	Preston	CT	06365
The Connection, Inc.	Adult Mental Health	39 Bristol Street	New London	CT	06320
The Connection, Inc.	Adult Mental Health	542 Long Hill Road	Groton	CT	06340
United Community And Family Services, Inc	Behavioral Health	21 Chicago Avenue	Groton	CT	06340
United Community And Family Services, Inc	Behavioral Health	77 East Town Street	Norwich	CT	06360
United Services	Behavioral Health	132 Mansfield Avenue	Willimantic	CT	06226
Specialty Health Locations and Programs					
Planned Parenthood of Connecticut	Family Planning	12 Case Street	Norwich	CT	06360
Planned Parenthood of Connecticut	Family Planning	1548 Main Street	Willimantic	CT	06226
Planned Parenthood of Connecticut	Family Planning	45 Franklin Street	New London	CT	06320
Planned Parenthood of Connecticut	Family Planning	87 Westcott Road	Danielson	CT	06239
Urgent Care Facilities					
Concentra	Urgent Care	10 Connecticut Avenue	Norwich	CT	06360
GoHealth Urgent Care	Urgent Care	351 North Frontage Road	New London	CT	06320
GoHealth Urgent Care	Urgent Care	624 West Main Street	Norwich	CT	06360
PhysicianOne Urgent Care	Urgent Care	220 Route 12	Groton	CT	06340
PhysicianOne Urgent Care	Urgent Care	607 W Main Street	Norwich	CT	06360
Veterans Health Administration					
John J. McGuirk VA Outpatient Clinic	Veterans Health Administration	Shaw's Cove Four	New London	CT	06320
Norwich Veteran's Center	Veterans Health Administration	2 Cliff Street	Norwich	CT	06360
Willimantic Outpatient Clinic	Veterans Health Administration	1320 Main Street	Willimantic	CT	06226

PROGRAMS DESIGNED TO ADDRESS 2015 HEALTH NEEDS



PERCIVAL
HEALTH ADVISORS

PROGRAMS DESIGNED TO ADDRESS 2015 HEALTH NEEDS

The following section outlines how Backus Hospital addressed the significant community health needs with a community health improvement plan based on the needs identified in previously conducted Community Health Needs Assessment in 2015.

DEVELOPMENT OF A ROBUST, DATA-DRIVEN, PRIMARY PREVENTION MODEL TO KEEP THE COMMUNITY HEALTHY AND REDUCE FUTURE DISEASE BURDEN

CANCER

Strategies & Scope

Provide cancer screenings and community outreach

1) Collaborate and partner with the Hartford HealthCare Cancer Institute, and affiliation with Memorial Sloan Kettering, to meet community health requirements
2) Hold annual head and neck cancer screening

Results & Outcomes

A. Developed Memorial Sloan Kettering community health requirements initiative
B. Annual head and neck cancer screenings held
   - 2015 - 126 people screened
   - 2016 - 77 people screened, 14 ENT referrals
   - 2017 - 28 screenings, 4 ENT referrals

ACCESS TO CARE

Strategies & Scope

1) Expand community outreach for health education and health screenings
   a) CareVan – provide more preventive and diagnostic screenings in more communities
2) Partner with HHC Senior Services to provide access to post-acute, Dementia, and Alzheimer's care

Results & Outcomes

A. MHRC: Weekly visits to St. Vincent DePaul partnering with Generations Family Health Center
   - 2015: 179 participants Norwich
   - 2016: 325 participants Norwich
   - 2016: 77 participants Prides Corner Farm, Lebanon
   - 2017: 164 participants Norwich
   - 2017: 73 participants Prides Corner Farm, Lebanon
B. Center for Healthy Aging established October 2016

OBESITY, PHYSICAL ACTIVITY, AND NUTRITION AND RELATED COMORBIDITIES

Strategies & Scope

1) Embed and support nutrition education by dedicated community dietitian in schools, community centers, senior centers, senior housing
2) Establish and expand the "Just Ask" initiative in restaurants and Shop Rite grocery stores
3) Continue the Healthy Eating Advocate Training (HEAT) program for health education sustainability.
4) Link to and work with the Backus Medical Weight Loss Center
5) Expand and work with the Backus Heart Failure program & support group
6) Expansion of Rx for Health program for low-income youth at-risk for obesity
7) Support the Backus "Healthy Community" initiatives – pilot program at Sprague Community Center
8) Support and partner with the UCFS H.E.L.P.S. program
9) Continue to provide diabetes self-management program and education classes
10) Provide glucose and cholesterol screenings in community settings
11) Continue monthly community BP clinics

Results & Outcomes

A. Community dietician utilized 32 hours/week for community events: Rx for Health Program (prescription for fresh fruits and vegetables at Norwich Farmers market)
    - 2015: 53 families participated
    - 2016: 57 families participated
    - 2017: 63 families participated
B. Just Ask program continued throughout 2017
C. HEAT program:
    - 2015: approximately 25 participants
    - 2016/2017: 32 participants
D. MD on staff at Medical Weight Loss Center - Dr. Tousignant, gap in service for approximately 1 year, replaced by Dr. Young November 17
E. Backus Heart Failure program- collaborating with Complex Care Team Q4 2017
F. Increased Rx for Health participation each year: 16% increase from 2015-2017
G. Continued support to Baltic Healthy Community initiative: $10,000 sponsorship/year
    - 2015: Monthly MHRC w/ Generations, monthly blood pressure screening, health coaching
    - 2016 & 2017: Monthly blood pressure screening and health coaching by RN and/or RD, 2 community events: Back to School Bash and Care Giver Event
H. Offered diabetes classes at BOCC. Provided diabetes symposium in 2015 (35 participants) and 2016 (140 participants). Monthly diabetes support group held at BOCC.
I. Screenings discontinued due to changes in recommendations by ADA
J. Monthly community BP clinics at Backus Hospital from 2015 to July 2017, then at Lisbon Senior Center starting in August 2017

SUBSTANCE USE, INCLUDING TOBACCO & RESPIRATORY DISEASES

Strategies & Scope

1) Sponsor the Better Breathers Club
2) Expand "Freedom from Smoking" cessation classes through UHD grant
3) Participate in the Statewide Asthma Coalition through CHA
4) Continue the "Be Aware" Program for high school students (drunk/distracted driving)

Results & Outcomes

A. Better Breathers Club 2015/2016- in effect. D/C 2017 lack of attendance
B. Partnered with Uncas Health for more tobacco cessation classes
C. Be Aware Program:
   - 2015: 425 students
   - 2016: 282 students
   - 2017: 289 students

CONTINUE TO PROVIDE COMMUNITY EDUCATION OPPORTUNITIES ABOUT HEALTH AND WELLNESS

Strategies & Scope

1) Provide Community Education series; examples include:
   - "Let's Talk About Your Health"
   - Arthritis Center education series
2) Publish health columns in The Day and, Norwich Bulletin newspapers

Results & Outcomes

A. Multiple Community Education series for 2015/2016. 2017- Individual lectures to a variety of community groups.
B. Monthly columns in both newspapers

MENTAL HEALTH AND SUBSTANCE USE

Strategies & Scope

1) Backus Hospital supports and collaborates with Natchaug Hospital, and the entire Behavioral Health Network, to ensure adequate access to mental health services are available to residents of the Backus Hospital region.
2) Coordinate training and education of professionals and the community on substance use disorder, especially heroin addiction:
   - Naloxone (Narcan) training for all EMS providers spearheaded by Backus ED Physician
   - Southeastern Naloxone Taskforce
   - Behavioral Health Network Mental Community Health Forums
   - "Current Drug Trends" educational program by SERAC
   - Mental Health First Aid training

Results & Outcomes

A. Dr. McLaine provided Narcan training for EMS
B. SERAC provided current drug trend events
C. BH community forums at Natchaug
D. MH First Aid Training now widely available, now on HealthStream

AMBULATORY EXPANSION AND GROWTH

ESTABLISH NEW FAMILY HEALTH CENTERS TO CREATE ADDITIONAL PRIMARY CARE AND URGENT CARE ACCESS POINTS FOR EASTERN CONNECTICUT RESIDENTS

Strategies & Scope

Access points will meet identified community needs and fill documented physician shortages, including primary care and specialists

Results & Outcomes

A. Filled physician shortages in Colchester, Montville, Norwichtown
B. Increased PCP's in region by 20

SUPPORT AND EXPAND PARTNERSHIPS WITH FEDERALLY QUALIFIED HEALTH CENTER (FQHC) PROVIDERS

Strategies & Scope

1) Support preferred FQHC expansion opportunities throughout Eastern Connecticut
2) Provide flu clinics at Soup Kitchens in the region

Results & Outcomes

A. Flu clinics offered at St. Vincent De Paul in Norwich

SUPPORT THE INDEPENDENT PRIMARY CARE PHYSICIAN NETWORK IN EASTERN CONNECTICUT

Strategies & Scope

1) Recruit and retain primary care providers to fill identified shortages and to supplement new shortages arising due to pending retirements
2) Link to the Medical Staff Development Plan to ensure community needs are met

Results & Outcomes

A. Recruited 20 new PCP's, coordinated with medical staff development plan

INCREASE ACCESS TO CARE (INCLUDING ORAL HEALTH) IN COMMUNITY SETTINGS

Strategies & Scope

1) Primary Care provided by preferred FQHC clinicians on Mobile Health Resource Van at local Soup Kitchens
2) Dental Clinic on Mobile Health Resource Van for community screenings

Results & Outcomes

A. MHRC with Generations every week at St. Vincent De Paul in Norwich 2015-2017
B. Dental screenings when Generations provider is available

ESTABLISHMENT OF CLINICAL PROGRAMS AND SERVICES IDENTIFIED IN THE EAST REGION STRATEGIC PLAN WHICH MEET IDENTIFIED COMMUNITY HEALTH NEEDS, AND SATISFY COMMUNITY BENEFIT REQUIREMENTS

CARDIOVASCULAR SERVICES (HEART DISEASE & STROKE)

Strategies & Scope

1) Establish Angioplasty services
2) Establish and expand Heart Disease management and infusion program
3) Expansion of the "Just Ask" campaign

Results & Outcomes

A. Angioplasty services denied by State of CT CON
B. Increased infusion centers in Plainfield and Waterford, increased cardiology in Plainfield, Vascular Lab in Norwich
C. No expansion of Just Ask

CANCER SERVICES

Strategies & Scope

Support the Memorial Sloan Kettering alliance through requirements set by MSK in its "Community Health" pillar. Please see the Cancer Institute Community Health Improvement Plan for action items.

Results & Outcomes

A. See previous cancer section

ACCESS TO MENTAL HEALTH SERVICES

INCREASE ACCESS TO COORDINATED MENTAL HEALTH SERVICES IN THE COMMUNITY

Strategies & Scope

1) Expand upon and refine the Primary Care Behavioral Health Project in the Colchester and Norwichtown Family Health Centers for immediate mental health care coordination and referral
2) Support the HHC/DCF partnership spearheaded by Regional Director of Emergency Care Services
3) Establish an Emergency Services-Community Public Safety Collaborative
4) Create a Center for Healthy Aging for the Geriatric populations in Eastern Connecticut
5) Sustain Community Care Teams embedded in the East Region Emergency Departments
6) HHC "Stop the Stigma" campaign
7) Education programs in schools focusing on stress, anxiety, depression, suicide prevention

Results & Outcomes

A. BHPC: HHC Initiative- currently at 12 sites, plan in place to increase to 20 sites system wide
B. DCF representative is in place at Backus
C. Public Safety Collaborative established
D. Center for Health Aging: Established 2016
E. Community Care Teams embedded in ED
F. HHC Stop the Stigma campaign completed
G. Educational programs in schools provided but intermittent

DEVELOPMENT OF A CARE COORDINATION MODEL FOR IDENTIFIED AT-RISK INPATIENTS, REGARDLESS OF PATIENT'S PAYOR SOURCE OR SOCIOECONOMIC STATUS

INITIATE A HIGH-RISK CARE COORDINATION TEAM, TO WORK ALONGSIDE THE HOSPITALIST TEAM, TO PROVIDE COORDINATION AND MANAGEMENT TO IDENTIFIED AT-RISK PATIENTS APPROPRIATE TO MANAGE PATIENTS ON AN OUTPATIENT AND ONGOING BASIS

Strategies & Scope

1) Hire an APRN and LCSW team
2) Team will ensure care plans are in place and utilized
3) Team will ensure "warm hand offs" to community physicians and partners in care
4) Team will be mobilized to provide home visits when necessary, at no charge to the patient or healthcare system
5) Team will coordinate with the Heart Failure program as well as disease-specific clinics whenever

Results & Outcomes

A. All strategies in place. APRN and LCSW team hired. Robust data available on current patient registry:
   - 67% decrease in pt. IP/OBS encounters
   - 47% decrease in length of stay
   - 68% decrease in total IP/OBS days
   - 5% decrease in ED usage

B. Home visits provided
C. Team collaborating with a Palliative Care and HF coordinator

DEVELOPMENT OF AN INTERDISCIPLINARY RISING-RISK CARE COORDINATION MODEL FOCUSED ON THE COMMUNITY AND OUTPATIENT SETTINGS, REGARDLESS OF PATIENT'S PAYOR SOURCE OR SOCIOECONOMIC STATUS

BUILD THE CAPACITY OF LOCAL HEALTH CARE CLINICS TO PROVIDE POPULATION HEALTH MANAGEMENT SERVICES

Strategies & Scope

1) Develop and sustain strong partnership with Integrated Care Partners (ICP)
2) Further the development of imbedded health coaches as a member of the care team in Family Health Centers in collaboration with ICP
3) Expand health coach model to private providers who are ICP members

Results & Outcomes

A. ICP – System Initiative expanded health coaches

MENTAL HEALTH

Strategies & Scope

1) Increase access to coordinated mental health services in the community
2) Expand upon and refine the Primary Care Behavioral Health Project in the Colchester and Norwichtown Family Health Centers for immediate mental health care coordination and referral
3) Support the HHC/DCF partnership spearheaded by Regional Director of Emergency Care Services
4) Establish an Emergency Services-Community Public Safety Collaborative
5) Create a Center for Healthy Aging for the Geriatric populations in Eastern Connecticut
6) Sustain Community Care Teams embedded in the Backus Emergency Departments

Results & Outcomes

A. Covered in other tactics

ACCESS TO CARE

Strategies & Scope

1) Establish new programs and opportunities to improve care coordination to support patients and community-based providers
   - Establishment of a peri-operative surgical home in multiple access points throughout the Region to reduce cost and duplicative testing
   - Establishment of the Geriatric Fracture Program
   - LLHD Falls Prevention Coalition
2) Improve accessibility and provide assistance for health insurance options and referrals
   - Utilize My Health Direct and ZocDoc to facilitate referrals to primary care and community programs
   - Uncas Health District and UCFS – AccessHealth CT agents for referral
   - Maintain and improve upon the Access to Care partnership with UCFS

Results & Outcomes

A. Peri-operative home has been established
B. My Health Direct: in effect for 2015, discontinued in 2016
C. AccessHealth CT agents with UCFS in effect for 2015, 2016, contract not renewed in fall 2017. New HHC vendor to replace Access to Health agents.

BUILD AN IT INFRASTRUCTURE TO PROVIDE RISK STRATIFICATION, AGGREGATION, AND ANALYSIS OF POPULATION HEALTH DATA

DETERMINE APPROPRIATE IT REQUIREMENTS TO SUPPORT INPATIENT AND OUTPATIENT CARE COORDINATION ACTIVITIES

Strategies & Scope

Inventory current resources and best practice approaches to data analytics in population health

Results & Outcomes

A. Not Completed

DEVELOP RISK STRATIFICATION COMPETENCIES AND PROCESSES

Strategies & Scope

Develop risk stratification competencies and processes

Results & Outcomes

A. Not Completed