Chenango County

2019-2021 Community Health Assessment/ Community Health Needs Assessment and Community Health Improvement Plan/ Community Service Plan

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Executive Summary

Chenango County Department of Public Health (CCPH) and UHS Chenango Memorial Hospital (CMH) contracted with Horn Research LLC to conduct the 2019-2021 Community Health Assessment (CHA) and Community Health Needs Assessment (CHNA). A Needs Assessment Committee was created and comprised of representatives from CCPH, CMH, and the Chenango Health Network (CHN). The committee provided oversight and guidance to the assessment process.

Priority Selection Process

Chenango County engaged in an iterative process to select priorities and activities for the Community Health Improvement Plan (CHIP)/Community Service Plan (CSP). The process allowed significant input from stakeholders and integrated feedback from the community. Healthcare and social determinants of health data were collected from a variety of sources including, but not limited to, the NYS Department of Health (NYSDOH), the US Census, the NYS Department of Education (NYSED), the NYS Office of Family and Children (NYSOCFS), and the Behavioral Risk Factor Surveillance Survey (BRFSS). Additional data resources utilized included the County Health Rankings and other local needs assessment reports.

Qualitative data was gathered from 51 Chenango County residents through focus groups and telephone interviews. Participants were asked to share their perspectives on the most pressing health issues facing the county, as well as the barriers and challenges they face in their effort to lead healthy lives. In addition, 23 key stakeholders representing a range of non-profit organizations, government agencies and providers, were interviewed to gain further insight into the county's health care strengths and barriers. Following these interviews, key stakeholders also participated in meetings where they ranked health priorities and mapped resources to identify opportunities for collaboration and enhancement of programming. Based on all qualitative data collected and stakeholder insight, the Needs Assessment Committee selected interventions with the greatest opportunity to optimize on

current resources and those that would have the greatest impact on the focus areas related to the county's most significant health issues.

Selected Priorities and Interventions

Prevent Chronic Disease: Preventive Care and Management

The most prevalent, serious and costly health problems facing the county are preventable chronic diseases such as cardiovascular disease, lower respiratory disease, lung and colorectal cancers, diabetes and hypertension. For cardiovascular disease, Chenango County has the highest age-adjusted mortality rate and the worst pre-transport mortality rate. It has the second highest age-adjusted mortality rate for chronic lower respiratory disease in the state and one of the worst age-adjusted emergency department visit rates. The primary drivers of these health outcomes are the county's high rates of obesity, tobacco use, and health illiteracy.

Health Disparity – Socio-Economic Status - Low-income individuals and families are frequently at greater risk for chronic disease and often lack the resources and knowledge to manage their illnesses. Several social determinants of health associated with low socio-economic status that are prevalent in the county include, access to healthy foods, access to health care services, and consistent, reliable transportation. The number of potentially preventable emergency department (ED) visits in Chenango County is higher for Medicaid beneficiaries than the county population as a whole and the over-use of the ED has put a strain on the system. These data suggest an opportunity to address a health disparity that impacts both the health of the low-income population and the health delivery system available to all Chenango County residents.

Intervention: Chronic Disease Self-Management Program - Past program results have indicated that participants have had an increase in knowledge of disease self-management. Results have also shown more specific benefits, such as clinical reductions in A1C levels for participants. Chenango County proposes to expand CHN's Chronic Disease Self-Management Program by establishing a referral process

of newly diagnosed patients through the hospital, by incorporating the hospital's head dietician and chef into the program's curriculum, creating a referral process through the health department's programs, and having health department staff become trained as peer leaders. A special emphasis will be placed on partnering with and recruiting from community-based organizations working with low-income individuals and families.

Promote Well-Being and Prevent Mental and Substance Use Disorders

Qualitative data show that a lack of well-being and increasing incidence of mental health issues are among the most pressing health issues facing the county. Chenango County's rate of adults reporting poor mental health and the suicide mortality rate for the county both exceed the Prevention Agenda goal. Chenango County's rates of ED visits due to mental health are higher than the NYS rates, but the hospitalization rate is much lower. This discrepancy suggests that residents rely on the ED for issues that could be better addressed in an alternative setting. The county is designated as a health professional shortage area for mental health and lacks psychiatric services. Current funding constraints present significant barriers to developing programs, creating new services or recruiting providers.

Health Disparity – Age - Youth, in particular, are at risk for poor mental health outcomes in the county. The suicide mortality rate of people aged 15-19 years in Chenango County exceeds the NYS rate and a higher number of Chenango County youth are self-injuring. Evidence of adverse childhood experiences can be found in the county's very high rate of substantiated allegations of abuse. Data also show that 17% of the county's youth are considered "disconnected" and over a third of high school students are not involved in school activities. Older adults in the county are also at risk for social isolation due to lack of transportation and the geography of the county.

Intervention: Mental Health First Aid - While increasing the number of mental health care providers would benefit the county, a more immediate and effective community-based intervention would be to expand the number of people trained to identify mental health issues in their professional

sphere and to provide appropriate support. Early detection and intervention could have a significant impact on the trajectory of young people in the county. Chenango County proposes to expand the *Mental Health First Aid* program by making hospital staff, health department staff, and providers available for training. Efforts will be made to promote the program and organize trainings for other stakeholders with a particular emphasis on training individuals who work with young people such as school staff, educators, and organizations serving youth.

Partners

Bringing partners to the table and maintaining their engagement will be vital to the success of the interventions within the chosen priority areas. The Needs Assessment Committee will create and maintain planning committees for each of the identified priority areas. These committees, and sub-committees, will bring together community stakeholders representing various constituencies including community-based organizations, governmental entities, funders, faith communities, and employers.

Impact and Process Measures

Those committees and sub-committees formed for each priority area will be charged with activity planning, measuring progress toward goals, and reporting on each priority area. The Needs Assessment Committee will provide support as needed to these committees to ensure impact and process measures are developed and that progress is made towards meeting these measures. See section on Process Measures, Time-Framed Targets, and Work Plan (page 85).

Introduction

Chenango County and UHS Chenango Memorial Hospital (CMH) contracted with Horn Research LLC to conduct the 2019-2021 Community Health Assessment (CHA) and Community Health Needs Assessment (CHNA). Horn Research was tasked with providing a detailed analysis of healthcare related data, gathering qualitative data from both key stakeholders and Chenango County residents, as well as facilitating a collaborative process to engage local community organizations in the selection of Prevention Agenda priority areas. A Needs Assessment Committee, comprised of representatives of the Chenango County Department of Public Health (CCPH), CMH, and Chenango Health Network (CHN), provided oversight and guidance to the assessment process. The coordination between the local health department (CCPH), the local hospital (CMH), and the local Population Health Improvement Program (PHIP) to develop the CHIP/CSP is indicative of the commitment to on-going collaboration toward meeting the shared community health goals.

The CHA/CHNA report was intentionally structured to provide detailed information on both social determinants of health and all priority areas defined in the Prevention Agenda. Chenango County has limited resources and the CHA/CHNA process provided a unique avenue to conduct a comprehensive assessment. The report identifies opportunities for local and regional organizations to obtain funding and take action related to specific health challenges and deficiencies in the county.

In addition to the detailed material in the report, key challenges and resources have been summarized to provide a more succinct review of Chenango County's community health landscape (pages 10-73). These summaries are followed by the Community Health Improvement Plan (CHIP)/Community Service Plan (CSP) (pages 81-83), which describes the priorities and interventions the county will be focused on for the next three years and the process used to select them.

Description of Chenango County

Chenango County is a rural county in the south central area of New York, frequently referred to as the Southern Tier. Contiguous counties include Madison, Otsego, Delaware, Broome, and Cortland. Norwich, the county seat, is approximately 112 miles west of Albany, 40 miles north of Binghamton, and 60 miles southeast of Syracuse. There are 21 townships, 8 villages, and 1 city in the county. The county's land area constitutes 899 square miles and is comprised mainly of rural landscapes with agricultural land (35%) and forest (60%) being the two most predominant. Approximately 112,000 acres, or 20%, of Chenango County's land is state owned.

The primary connector from Chenango County to the rest of New York State is State Route 12, which provides links to the NYS Thruway, and Interstates 81, 86, and 88. There is access to air transportation through commercial airports in Binghamton, Utica, Syracuse and Albany. Binghamton airport is the closest airport at 42 miles from Norwich. In addition, the Lt. Warren Eaton Airport in Norwich provides access to private air travel. CMH has a heliport which allows patients in need of intensive care to be airlifted to larger care centers. The county does not have access to commuter rail transportation. Coach USA and Greyhound Lines offer bus transportation to and from the area. Chenango First Transit provides bus service via six fixed routes within the county.

The travel time to hospitals other than CMH for Chenango County residents is substantial. As noted in Table 1, the nearest large hospitals require travel of up to 45 minutes or more.

Table 1. Distance and Travel Time from Norwich to Regional Hospitals

Hospital	*City*	*Distance in Miles from Norwich*	*Travel Time*
A.O. Fox Hospital	Oneonta	32	45 minutes
M.I. Bassett Healthcare	Cooperstown	44	1 hour
Binghamton General Hospital	Binghamton	43	1 hour
Community Memorial Hospital	Hamilton	22	30 minutes
Cortland Regional Medical Center	Cortland	43	1 hour
Crouse Hospital	Syracuse	58	1 hour, 15 minutes
Our Lady of Lourdes Hospital	Johnson City	42	1 hour
Syracuse VA Medical Center	Syracuse	58	1 hour, 15 minutes
Tri Town Regional Hospital (ED Only)	Sidney	22	30 minutes
Upstate University Hospital	Syracuse	58	1 hour, 15 minutes
Wilson Medical Center	Johnson City	44	1 hour

Total Population

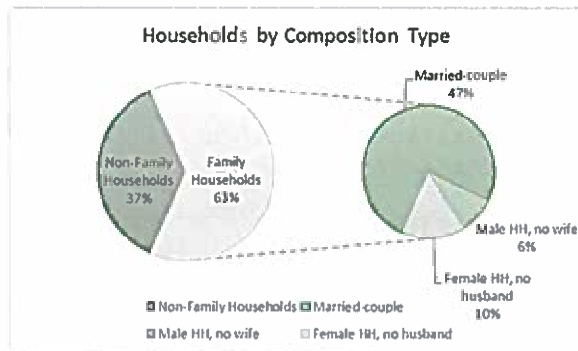
As of 2017, the most current population total for Chenango County is 49,286,[1] which has declined by 5.4% since 2010. The main factor in the population's decrease has been domestic migration (N=2,417.)[2] When looking at the population by age, nearly a quarter or 23.5%, of the Chenango County population is under age 19 and 18.9% is aged 65 and over. A further breakdown is demonstrated below.

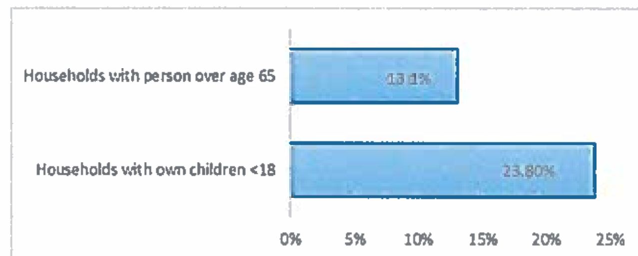
Table 2. Number and Percent of Population by Age Group and Sex

Age group	*Male*		*Female*		*Total*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Under age 5	1,304	5.3%	1,284	5.2%	2,587	5.2%
5 – 19	4,674	19.0%	4,345	17.6%	9,019	18.3%
20 – 64	14,293	58.1%	14,120	57.2%	28,413	57.6%
65 – 84	3,936	16.0%	4,271	17.3%	8,207	16.7%
85 and older	394	1.6%	666	2.7%	1,060	2.2%
Total	24,601	100.00%	24,686	100.00%	49,286	100.00%

Households and Families

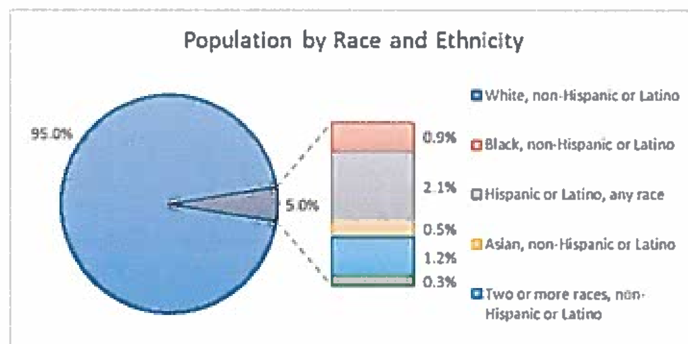
Chenango County has a total of 19,837 households, 63% of which are family households. Nearly half, 47%, of family households include married couples.[3] Thirteen percent of households include someone aged 65 and over, while nearly a quarter of households include children under the age of 18.





Race and Ethnicity[4]

When examining race and ethnicity, Chenango County lacks diversity. In the county, 95% of residents are white.



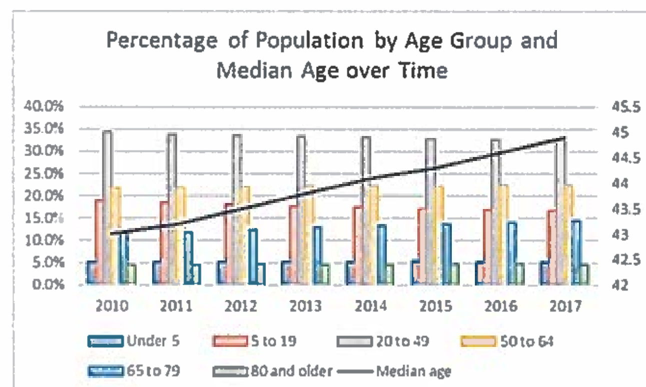
[1] Table S0101. Age and Sex, ACS 5-year estimates 2012-2016

[2] Table PEPTCOMP. Estimates of the Components of Resident Population Change: April 1, 2010 to July 1, 2017, 2017 Population Estimates. US Census Bureau, Population Division

[3] Table S1101. Households and Families, ACS 5-year estimates 2012-2016

[4] Table B02001. Race: Total Population, ACS 5-year estimates 2012-2016

Age Demographics
As with the rest of the United States, the population of Chenango County is aging. The median age of the population has continued to increase over time, rising from age 43 in 2010 to age 44.9 in 2017. The group that has seen the largest increase during this time is adults aged 65 to 79, with a population increase from 11.6% in 2010 to 14.5% in 2017.[5]



Social Determinants of Health Impact on Chenango County

As noted by the federal Office of Disease Prevention and Health Promotion in their Healthy People 2020 campaign, *"Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be...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."*[6]

Based on the Healthy People 2020 place-based framework, the five key social determinant areas explored for the Chenango County Community Health Assessment include:

- Economic Stability
- Education
- Social and Community Context
- Access to Health Care
- Neighborhood and Built Environment

Stakeholders and focus group participants frequently noted various social determinants, such as these, as primary challenges to improving health in the community.

[5] Table PEPAGESEX. Annual Estimates of the Resident Population for Selected Age Groups by Sex: April 2010 to July 2017. 2017 Population Estimates, Census Bureau.
[6] https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health retrieved on 10/25/18

Economic Stability
Several stakeholders and community participants noted that the less-than-robust economic environment of Chenango County is an important factor related to health. As one stakeholder noted, *"There are a lot of people here who are very extremely hardworking and doing best they can, but they're a car repair away from being homeless."*

<u>*Employment*</u>
A handful of key stakeholders noted that a lack of jobs in the area was a key driver of health problems in the county. One stakeholder said, *"If you could bring jobs here, that impacts everything. It impacts health, impacts the community positively, increases self-worth, crime goes down, and people have money to spend. A key component is jobs."*

The Chenango County unemployment rate is typically higher than that of NYS as a whole. As of March 2018, the Chenango County unemployment rate (not seasonally adjusted) was 6.7% while the NYS rate was 4.4%.

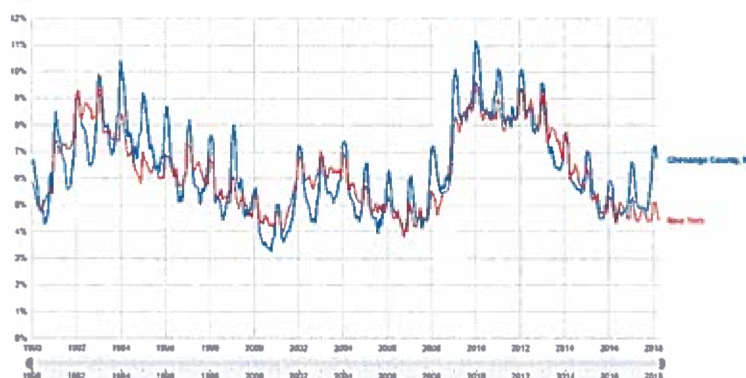


Table 3. Employment Status by Age[7]

Age range	*Labor Force Participation Rate*	*Employment/Population Ratio*	*Unemployment Rate*
16 to 19	36.7%	27.0%	26.3%
20 to 24	77.2%	66.6%	13.3%
25 to 29	76.8%	70.6%	8.0%
30 to 34	80.6%	76.1%	5.4%
35 to 44	79.3%	74.5%	6.0%
45 to 54	75.7%	72.3%	4.3%
55 to 59	65.6%	62.3%	5.1%
60 to 64	50.5%	48.4%	4.3%
65 to 74	20.5%	19.6%	4.7%
75 years and older	6.2%	5.8%	7.7%

Of the 30,870 people aged 16-64 in the county, 72.3% (22,322) worked at least part-time for part of the year. The number of people aged 16-64 in Chenango County who did not work at all increased from 7,755 (23.8%) to 8,548 (27.7%) between 2010 and 2016. Of those workers who did work, nearly two-thirds or 63.6%, worked full-time, year-round, and 78.9% of workers usually worked 35 hours or more in 2016, slightly up from 77.2% in 2010.[8]

In 2016, 16.4% of the people in Chenango County aged 18 to 64 identified as having a disability, an increase from 13.6% in 2012. Two-thirds of people with disabilities are not in the labor force while just over a quarter are employed.[9]

[7] Table S2301, Employment Status, 2012-2016 American Community Survey 5-Year Estimates
[8] Table S2303, Work Status in the Past 12 Months, 2012-2016 American Community Survey 5-Year Estimates
[9] Table C18120, Employment Status by Disability Status, 2012-2016 & 2008-2012 American Community Survey 5-Year Estimates

Table 4. Number of Residents by Employment Status and Disability Status

Employment Status	*With a Disability*	*No disability*
Employed	1,273	18,475
Unemployed	285	1,159
Not in labor force	3,251	4,797
Total	4,809	24,431

In the 2017 *Opportunities for Chenango (OFC) Needs Assessment*, 34% of Head Start families said that finding a good job was one of their biggest concerns for their family's future, while 19% said the same about keeping their current job.

Income & Poverty

Poverty was cited as a key barrier to having a healthy community by several stakeholders and focus group participants. One stakeholder shared, *"You've got close to 50% that are either poor or just marginally making it. I think that's the number one challenge. You don't have a prosperous economy or population. When you have no money, you have challenges in your life day to day, transportation barriers; your focus is on survival and not wellness or prevention. We can do all sorts of things to improve access, for example, urgent care if you don't want people to access the emergency room, mobile services...all are good, but the bottom line challenge for this county is a deep-rooted poverty scenario that factors into negative health indicators."* Another stakeholder said, *"I think that there's a lot of social determinant stuff that hinder people that would otherwise be able to access the resources they need. For example, I may have Medicaid, but I don't have a babysitter and I don't have transportation to my appointments."* Focus group participants noted the negative impact of poverty on people's ability to not only choose healthier options including for food and exercise, but also its impact on their ability to understand or embrace the importance of preventive care.

Chenango County has a significantly lower median income than NYS as a whole both for households and families. This suggests that the county population overall has less "buying" power.

Table 5. Income by Region[10]

	Chenango County	*NYS*
Median Household Income 2016	$46,979	$60,741
Median Family Income 2016	$58,675	$74,036

There are many different indices and measures that describe income in a community. The most persistent and prevalent indicator used is the poverty rate. The initial federal poverty thresholds were based on a number derived from multiplying the cheapest of four USDA-developed food plans by three. Since their initial development in the 1960s, these poverty threshold bases have not been substantially changed.

As noted in Table 6, Chenango County has slightly lower percentages of families and individuals with incomes below the poverty level than NYS as a whole.[11] The percentage of both families and individuals has increased somewhat since 2010. The percentage of people in Chenango County aged 65 and over with incomes below the poverty level is less than NYS and has decreased since 2010. Census data indicate that approximately one in five children in Chenango County live in households with incomes

[10] Table DP03. Selected Economic Characteristics, ACS 5-year estimate 2012-2016

[11] Table DP03. Selected Economic Characteristics, ACS 5-year estimate 2012-2016 & 2006-2010

below the poverty line, a rate which has remained relatively steady since 2010. Children living in a household with a single mother in Chenango County are much more likely to live in poverty than in the state as a whole.

Table 6. Percent of Individuals and Households with Incomes Below Poverty by Region and Year

Percent with Incomes Below Poverty	*Chenango*		*NYS*	
	2010	*2016*	*2010*	*2016*
All families	9.1%	10.2%	10.8%	11.7%
All individuals	13.6%	15.4%	14.2%	15.5%
Individuals aged 65 and over	11.8%	8.4%	11.5%	11.4%
Children under 18 living in households	18.7%	18.9%	19.9%	21.9%
Families with female head of householder, no husband present with related children under 18 years	44.9%	44.2%	36.5%	37.9%

Despite the prevalence of the use of poverty rates as a descriptor for geographies, there is ongoing concern that the poverty thresholds do not adequately capture the number of people and households that have insufficient income to meet their basic needs. Many federal assistance programs acknowledge this by offering assistance to individuals and families with incomes above the poverty thresholds. For example, eligibility for SNAP (formerly referred to as Food Stamps) allows for incomes up to 130% of the poverty level and WIC allows for incomes up to 185% of the poverty level. While 18.9% of children in Chenango County live in households with incomes below poverty, nearly 30% live in households that receive SSI, Cash Public Assistance Income, or SNAP. Of these children, 45% live in a family with both parents present.[12]

Table 7. Number and Percent of Households in Chenango County with SSI, Cash Assistance or SNAP by Household Type

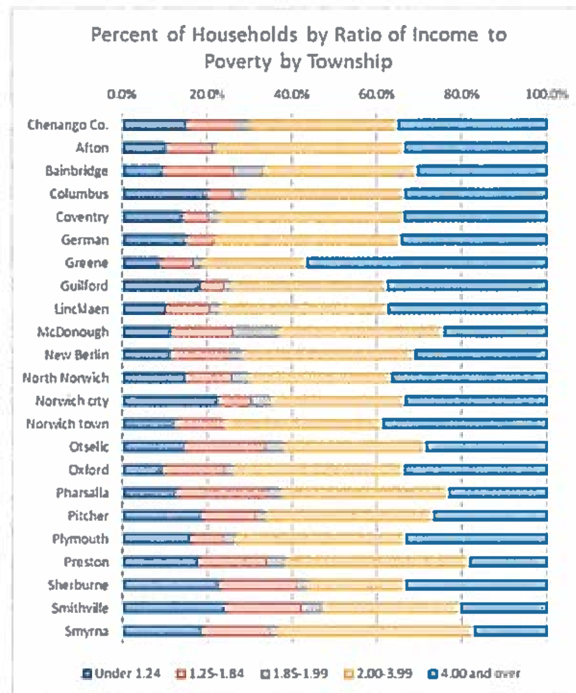
	Number	*Percent*
Married couple family	1,378	44.6%
Male householder, no wife present	593	19.2%
Female householder, no husband present	1,093	35.4%

Anti-poverty groups have argued that the federal poverty thresholds do not adequately account for the entirety of the population of those who are unable to provide for their basic needs. A commonly used rule of thumb to determine the number of households that have incomes below those that allow for basic needs to be met is to calculate the number of households with incomes at or below 200% of the poverty threshold. Nearly 30% of households and 37.5% of individuals in Chenango County meet this standard.[13]

[12] Table B09010, Receipt Of Supplemental Security Income (Ssi), Cash Public Assistance Income, Or Food Stamps/Snap In The Past 12 Months By Household Type For Children Under 18 Years In Households, 2012-2016 American Community Survey 5-Year Estimates

[13] Table B17026, Ratio of Income to Poverty Level of Families in the Past 12 Months & Table C17002, Ratio of Income to Poverty Level in Past 12 Months, American Community Survey, 5-year estimates, 2012-2016

The geographic distribution of households by ratio of income to poverty is significant. The Smithville (46.9%) and Sherburne (43.2%) Townships have significantly higher percentages of households falling in this 200% or below income range while the Greene Township has the greatest percent of households with incomes above 200% of the poverty threshold.



Seniors & Income Insecurity

The Elder Economic Security Index is a measure specifically designed to address the cost of living for older adults.[14] The Elder Index examines the costs of the essentials of daily life such as housing, transportation, food, and health care, and determines the annual income required to meet those needs. The cost of living for all household types in the Elder Index for Chenango County is significantly higher than the poverty line, suggesting that more seniors are economically insecure than indicated in Census poverty data.

Table 8. ***Elder Economic Security Index*** *for Chenango County & Ratio to Poverty*

	Elder Person, aged 65+			*Elder Couple, both age 65+*		
	Owner without mortgage	*Renter*	*Owner with mortgage*	*Owner without mortgage*	*Renter*	*Owner with mortgage*
Index per month	$1,625	$1,689	$2,245	$2,500	$2,564	$3,120
Index per year	$19,500	$20,268	$26,940	$30,000	$30,768	$37,440
Ratio to poverty	164%	171%	227%	187%	192%	234%

The Census does not cross-tabulate data by housing, income and age by county which prevents a more accurate analysis of the number of older adults considered economically insecure based on the Elder Index from being obtained. However, Census data does provide the number of seniors with incomes at specific ratios to poverty. These data suggest over a third of people aged 65 and over in Chenango County have incomes below 200% of poverty and would be considered economically insecure.

[14] Gerontology Institute at the University of Massachusetts, Boston

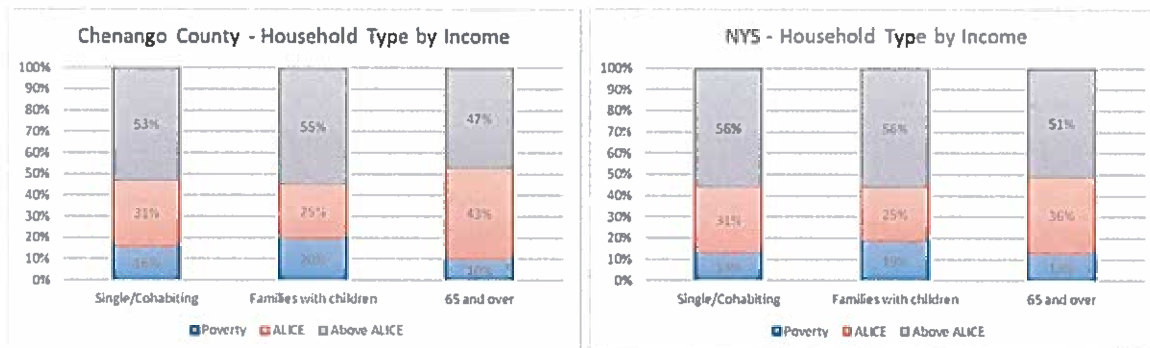
Table 9. Number and Percent of People aged 65 and older in Chenango County by Ratio of Income to Poverty Threshold[15]

Ratio to Poverty	*Number*	*Percent*
Under 1.00 of poverty	761	8.4%
1.00 to 1.84 of poverty	1,993	22.0%
1.84 to 1.99 of poverty	339	3.7%
2.00 to 2.99 of poverty	2,042	22.5%
3.00 to 3.99 of poverty	1,493	16.5%
4.00 or over	2,428	26.8%
Total	9,046	

ALICE Threshold

The United Way has developed a concept called ALICE (Asset Limited, Income Constrained, Employed) to describe a population that has traditionally been called the "working poor" along with an income threshold to define this population. The threshold is designed by looking at local costs for housing, child care, food, transportation, health care, technology, and taxes to determine a baseline "household survival budget." It does not include savings or any other non-essentials. The ALICE population is generally expected to be employed. The threshold, however, has been used to define the number and percentage of all households that would fall into those income ranges, whether traditionally employed or not.

The 2016 ALICE report for Chenango County found that a single adult living in the county would need an annual income of $21,420 (180% of poverty) and a family of four requiring childcare would need an income of $61,788 (254% of poverty) in order to be considered within the ALICE threshold guidelines.



The report estimates that 48% (N=9,522) of households in the county have incomes below the ALICE threshold compared with 45% of households in NYS as a whole. According to the Chenango County and NYS ALICE reports, the breakdown of income is similar between Chenango County and NYS for families with children. Fewer single person households and households with people aged 65 and over in Chenango County have incomes above the ALICE threshold than in NYS as a whole. The most significant difference between county and state data is the percentage of seniors in Chenango County with incomes in the ALICE range (43%) which is much higher than the NYS rate (36%).[16]

[15] Table C27017, Private Health Insurance by Ratio of Income to Poverty Level in the Past 12 Months by Age, 2012-2016 American Community Survey 5-Year Estimates

[16] ALICE: A Study of Financial Hardship in New York, United Way

Overall, the ALICE threshold suggests that more Chenango County residents, with the exception of children, are income insecure. Of particular note, the percentage of people aged 65 and over identified by the ALICE threshold as income insecure is significantly higher than all other metrics.

Table 10. Percent of Chenango County Residents by Income Insecurity Metric

	100% of Poverty (Individuals)	*200% of Poverty (Individuals)*	*ALICE (households)*
All	15.4%	36.4%	48%
Children	18.9%	45.8%	45%
Seniors	8.4%	27.9%	53%

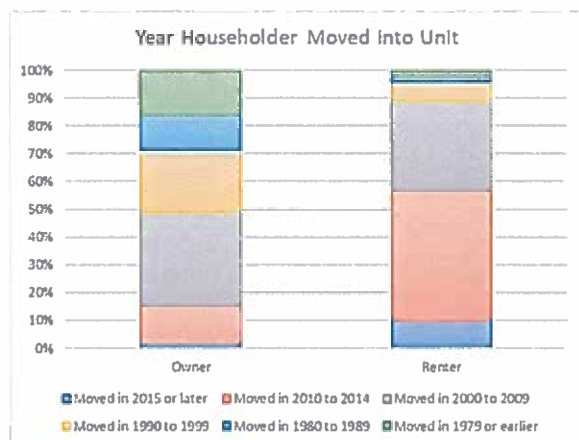
Housing Instability

A number of key stakeholders and focus group participants noted that housing can be a social determinant affecting health conditions in the county, but neither touched specifically on housing instability. Housing instability such as falling behind on rent, moving frequently, or experiencing periods of homelessness, has been linked to negative health consequences such as more frequent hospitalizations and emergency room visits.[17] Slightly more Chenango County residents (6.8%) moved more than once within the county per year compared to those in New York State as a whole (6.2%).[18] People who have incomes below poverty or who are renters are much more likely to move within the county. Nearly one in five renters in Chenango County had moved within the county in the previous year.

Table 11. Percent of Population that Moved within the Same County in Past Year

	Chenango	*NYS*
Percent below 100% of poverty	13.4%	9.8%
100 to 149% of poverty	6.7%	7.4%
At or above 150% of poverty	5.2%	5.0%
Owner-occupied	3.1%	3.0%
Renter-occupied	18.8%	9.8%

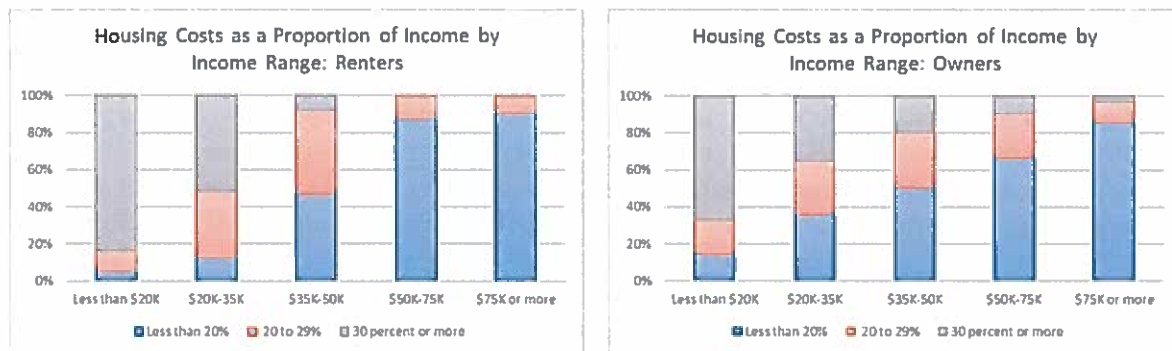
Owners have much longer tenure within their homes in Chenango County. The median year owners moved into their homes was 2000 while renters moved into their homes in 2011.[19]



[17] *Unstable Housing and Caregiver and Child Health in Renter Families*, Megan Sandel, et. al., Pediatrics, February 2018, Volume 141, Issue 2.
[18] Table S0701, Geographic Mobility by Selected Characteristics in the United States, 2012-2016 American Community Survey 5-Year Estimates
[19] Table B25039, Median Year Householder Moved into Unit by Tenure, 2012-2016 American Community Survey, 5 Year Estimates

In the *2017 OFC Needs Assessment*, families were asked how many times their family had moved in the past 2 years. Almost half (48%) of respondents indicated their family had moved one or more times in that time frame.

An important factor in housing instability is the cost of housing as compared to income. Unsurprisingly, households with lower incomes are more likely to have housing costs which exceed a third of their income.[20] Nearly 84% of renters in Chenango County making less than $20,000 per year pay more than 30% of their income in housing costs. Middle- and higher-income owners are more likely to pay excessive housing costs relative to their income than are renters in the same income category. Nearly one in five owners making between $35,000-$50,000 per year pay 30% or more of their income for housing costs while almost 10% of owners making between $50,000-$75,000 per year pay the same percentage.



By far, the City of Norwich has the highest percentage of households with monthly costs greater than 30% of household income. However, several other townships have high percentages of renters facing similar housing costs versus their income, including the towns of Oxford, Afton, McDonough, and Norwich (town).[21]

Table 12. Percent of Households with Monthly Housing Costs Greater than 30% of Household Income

Town	*All*	*Owners*	*Renters*
Afton	14.3%	10.3%	34.7%
Bainbridge	10.5%	4.6%	28.3%
Columbus	12.2%	9.6%	30.4%
Coventry	15.5%	13.6%	26.0%
German	16.5%	16.2%	18.2%
Greene	9.6%	7.1%	17.6%
Guilford	15.8%	15.0%	19.6%
Lincklaen	8.8%	8.0%	13.6%
McDonough	14.6%	12.4%	34.3%
New Berlin	10.5%	5.7%	30.8%
North Norwich	12.7%	11.2%	23.8%
Norwich (city)	23.0%	6.2%	40.3%
Norwich (town)	12.2%	6.4%	41.2%
Otselic	12.6%	7.2%	28.7%
Oxford	12.6%	6.1%	40.8%

[20] Table B25106, Tenure by Housing Costs as a Percentage of Household Income in the Past 12 Months, 2012-2016 American Community Survey 5-Year Estimates
[21] Table 2503, Financial Characteristics, 2012-2016 American Community Survey 5-Year Estimates

Town	All	Owners	Renters
Pharsalia	5.9%	4.9%	17.4%
Pitcher	14.1%	12.0%	22.2%
Plymouth	11.9%	12.1%	10.7%
Preston	7.0%	6.5%	9.6%
Sherburne	14.0%	9.1%	21.4%
Smithville	14.5%	11.1%	28.2%
Smyrna	13.2%	10.1%	21.6%

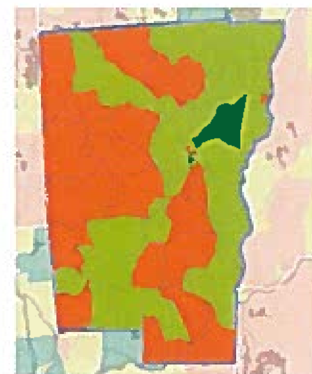
Education

A handful of stakeholders and focus group participants said that education is a factor affecting the health of Chenango County residents. One focus group participant said, *"We have a huge population of people who just don't care. I think that probably education and not knowing how important (health care) is. A lot of them work all day and trying to get to the doctor is problem. They can't be bothered and don't see it as an urgency or as important."* Another noted, *"The extent of disparity is more significant in Chenango County, including income, education, and health. If you look at any of that, Chenango County is at the bottom of the list. I think that's unfortunate and there are some reasons for that. I don't think it's coincidental that the educational level is lowest and the county fathers voted not to have a community college. There have been unfortunate decisions and lack of leadership on a county level."*

Literacy

Data from the *2017 OFC Needs Assessment* Head Start survey indicated that 15% of respondents have difficulty with reading, writing or math and the National Center for Education Statistics (NCES) estimated in 2003 that 12% of Chenango County residents lacked basic prose literacy skills.[22] The University of North Carolina at Chapel Hill has used NCES data to develop a "health literacy" scale to identify communities which may have residents with problems reading and understanding basic health information.[23] The scale suggests that 30% or more of the population in Chenango County has basic or below basic health literacy scores. The average health literacy score of 247.2 in Chenango is somewhat higher than the average health literacy score of 241.7 for New York State as a whole, but both fall within the second quartile (first quartile = lowest, fourth quartile = highest).

- Adults with Below Basic health literacy skills may be able to locate information in simple text (e.g., the time of their next clinic visit from an appointment slip), but would struggle with information in more complex documents.
- Adults with Basic health literacy skills are able to locate multiple pieces of information in a document, but may have difficulty interpreting or applying this information (e.g., determining whether their body mass index is in a healthy range).



A number of stakeholders noted that the lack of education in the county impacts the health literacy of the population. One stakeholder said, *"The lack of literacy success is a challenge. People aren't academically minded and aren't going out to research what something is. My father-in-law passed away from cancer. He was taking so many medications. Hospice was relatively helpful and we were also capable of figuring it out alone by looking at bottles and creating a spreadsheet. But when you're talking about someone who isn't educated and struggles with literacy, I*

[22] https://nces.ed.gov/naal/estimates/StateEstimates.aspx

[23] APA: National Health Literacy Mapping to Inform Health Care Policy (2014). Health Literacy Data Map. University of North Carolina at Chapel Hill. Retrieved June 1, 2015, from http://healthliteracymap.unc.edu/#

would say there's a huge percentage of people who are not properly taking their medication. It's because I'm not sure they comprehend the instructions on the bottle, or if they're taking multiple medications, they can't wrap their heads around a system." Another stakeholder said, *"People don't understand when and where to go and don't understand their health conditions. I had a patient who was illiterate and asked me to explain differently."* Another stakeholder mentioned, *"There is a challenge with people's knowledge of what they have insurance-wise, what's covered. I think there are a lot of services that folks have for benefits, but they don't even know and don't take advantage whether it's an annual visit or vision or a mammogram. Even if they have access to Medicare or Medicaid, (they don't know) what assistance they can receive to support their health and well-being."*

Educational Attainment

Chenango County has seen an overall increase in the educational enrichment of its citizens with higher percentages of residents attaining some level of college education.[24] There is a positive trend among young people reaching greater levels of education, but Chenango County continues to lag behind New York State in higher education. Only 17.5% of Chenango County residents have at least a 4-year degree as compared with 34.8% of NYS residents.

Table 13. Percent of Population 25 and Over by Educational Attainment by Region and Year

	Chenango County		*NYS*	
	2010	*2016*	*2010*	*2016*
Less than 9th Grade	3.4%	3.5%	7.0%	6.5%
9th-12th Grade/No diploma	11.5%	9.6%	8.6%	7.5%
HS graduate	39.6%	38.7%	28.2%	26.4%
Some college, no degree	17.2%	19.0%	15.9%	16.1%
Associates degree	11.3%	11.8%	8.2%	8.6%
Bachelor's degree	10.2%	9.3%	18.3%	19.7%
Graduate or professional degree	6.7%	8.2%	13.8%	15.1%

Table 14. Percent of Population by Specific Educational Attainment by Age Group, Region, and Year

	Chenango County		*NYS*	
	2010	*2016*	*2010*	*NYS – 2016*
Population 25-34 years				
HS or higher	85.6%	90.0%	88.0%	89.7%
Bachelor's or higher	15.9%	21.2%	40.8%	43.6%
Population 35-44 years				
HS or higher	88.9%	90.0%	87.6%	87.7%
Bachelor's or higher	17.0%	19.4%	35.0%	39.4%

Other Education Indicators

Achieving proficiency in English Language Arts (ELA) by grade three is considered critical for future educational success. While the percentage of Chenango County third-graders achieving proficiency in ELA has increased since the 2013-2014 school year, fewer students achieve proficiency as compared to NYS as a whole.[25] In particular, students with disabilities, Hispanic/Latino students, male students, and economically disadvantaged students are less likely to be proficient. The school dropout rate in Chenango County is equal to the NYS rate, but the percentage of students achieving a Regents diploma is lower in Chenango County than in NYS as a whole.

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[24] Table S1501, Educational Attainment, 2012-2016 &

[25] NYSED Report Cards 2013-2014 & 2016-2017

Table 15. K-12 Educational Indicators by School Year and Region

Indicator	Chenango County		NYS	
	2013-2014	2016-2017	2013-2014	NYS 2016-2017
Dropout rate	3%	3%	3%	3%
Regents Diploma	90%	88%	93%	93%
Regents with Advanced Designation	36%	36%	38%	38%
Grade 3 ELA Percent Proficient				
All students	18%	27%	32%	43%
Students with disabilities	1%	2%	7%	13%
Hispanic or Latino	17%	19%	20%	33%
Female	21%	36%	36%	49%
Male	16%	18%	28%	38%
Economically disadvantaged	11%	19%	20%	32%

Early Childhood Education

Early childhood education provides an important base for lifelong learning and cognitive and social development. According to data provided by the *2017 OFC Needs Assessment*, NYSED, and the Kids Count Data Center, only 43% of 3- and 4-year-old children in Chenango County are enrolled in an early education program. While there is clearly an opportunity to increase the number of children receiving early childhood education, Chenango County is currently surpassing New York State which has just a 37% enrollment rate in either Universal Pre-K or Head Start.[26]

Table 16. Early Childhood Education Enrollment by Region

	Chenango County	New York State
Universal Pre-K (half day)	143	29,630
Universal Pre-K (full day)	179	93,051
Head Start Enrollment	138	52,380
Total enrolled	460	175,061
Total children aged 3-4[27]	1,063	469,723
Percent of children enrolled in early education program	43.3%	37.3%

Social and Community Context

The social and community context within which a person lives can have a significant impact on their health. This can include social relationships and how involved a person is within social, religious, or cultural institutions, as well as incarceration rates and the prevalence of discrimination in the community.

Civic Participation

A handful of key Chenango County stakeholders noted the community's general lack of engagement with or interest in their community environment. One stakeholder said, *"There isn't a history here of when a health service closes, there is an immediate grassroots response."* A stakeholder working with substance use disorders said, *"The community overall has not really jumped on board. I feel like they have their hand out and keeping a distance. We had a forum and sent personal invitations to people in the community who we thought we were leaders, but very few of them showed up."*

[26] http://www.ofcinc.org/newsmedia/OFC_CNA2017vFinal.pdf, https://data.nysed.gov/, https://datacenter.kidscount.org

[27] In 2010, the US Census reported 1,136 children aged 3 or 4 in Chenango County. By 2016, the overall population of children under age 5 reduced by 6.4% which provides an estimated 1,063 children aged 3 or 4 in 2016. Comparatively, in 2010, the US Census reported 462,554 children aged 3 or 4 in New York State. By 2016, the overall population of children under age 5 increased by 1.6% which provides an estimate of 469,723 children aged 3 or 4 in 2016.

While the majority of potentially eligible residents (aged 18 and over) are registered to vote (77.9%), only 60% of those registered residents voted in the most recent presidential election.[28] With fewer than half of potentially eligible residents voting, there is ample opportunity to increase community engagement with elections. In particular, voter turnout in local elections is very low in the county. In the most recent Board of Supervisor's elections, just over a third or 35.7% of registered voters cast ballots and only 22.9% of potentially eligible voters participated. Part of the lack of engagement may be due to the lack of choices available. In 2017, of the 22 seats on the Board that were up for election, only 4 were contested.

Table 17. Voter Participation by Region

	Chenango County	*New York State*
Active Voter Registration	28,030	11,303,448
Inactive Voter Registration	2,155	1,092,955
Total Voter Registration	30,185	12,396,403
Number of Potentially Eligible Voters (age 18 and over)	38,739	15,462,504
Percent Registered	77.9%	80.2%
Number voted in 2016 Presidential Election	18,113	7,801,985
Percent Participation by Registered Voters	60.0%	62.9%
Percent Participation by Potentially Eligible Voters	46.8%	50.5%

Table 18. Voter Participation by Town and Competitiveness of Election

Town	*Registered Voters*	*Votes Cast*	*Percent of registered voters participating*	*Competitiveness*
Afton	1,576	556	35.3%	Unopposed
Bainbridge	1,777	659	37.1%	Unopposed
City of Norwich	680	335	49.3%	Unopposed
City of Norwich	441	176	39.9%	Unopposed
Columbus	532	217	40.8%	Unopposed
Coventry	970	298	30.7%	Unopposed
German	214	103	48.1%	Unopposed
Greene	3,369	902	26.8%	Unopposed
Guilford	1,638	587	35.8%	Unopposed
Lincklaen	221	85	38.5%	Unopposed* (2015)
McDonough	554	271	48.9%	
New Berlin	1,333	333	25.0%	Unopposed
North Norwich	997	436	43.7%	Unopposed
Norwich	2,118	878	41.4%	Unopposed
Oxford	2,260	837	37.0%	
Pharsalia	338	91	26.9%	Unopposed
Pitcher	404	108	26.7%	Unopposed
Plymouth	986	450	45.6%	
Preston	611	186	30.4%	Unopposed
Sherburne	2,326	679	29.2%	Unopposed
Smithville	810	325	40.1%	Unopposed
Smyrna	722	374	51.8%	

[28] Table S0101, Age and Sex, 2012-2016 American Community Survey 5-Year Estimates, NYS Board of Elections data

According to County Health Rankings by the University Of Wisconsin Population Of Health Institute, Chenango County has an "association rate" of 11.9. The association rate is the number of associations, such as civic organizations, golf clubs, sports organizations, religious organizations, and professional associations, per 10,000 people. The association rate is a measure to reflect social isolation and social capital. New York State's association rate is 7.9 suggesting that Chenango County has a higher than average number of opportunities for residents to engage with community groups.

Social Cohesion

Because Chenango County is primarily rural, there are challenges to maintaining social cohesion, particularly among groups that have limited transportation options. Seniors have the highest risk of becoming isolated. Of the households with a person aged 65 and older, 44% of these seniors live alone. While this is slightly lower than NYS as a whole (46.7%), the percentage is high enough to be notable and of concern.[29] One focus group participant noted, *"We had a friend who is my mother's age. She was probably starting a little dementia, had a stroke, and lived in a rural area. She had a helpline, but was on the bathroom floor and couldn't remember to use it. There are a lot of people isolated like that."* Another participant said, *"One thing I did when my son moved away, I asked co-workers to check on me if I didn't come in and didn't call in. Anybody living alone and aging ought to have somebody checking on them."*

Young adults are also at risk for isolation in rural counties. According to Measure of America, 17% of Chenango County youth are considered "disconnected": young people between the ages of 16 and 24 who are not in school and not working.[30] This rate is significantly higher than the New York State rate of 12.1%. When youth are disconnected, "they are more likely to struggle with mental illness or substance use, encounter violence, and become teen parents."[31] In the county, juvenile arrests have varied year to year in both total numbers as well as type of crime. Looking at the juvenile arrest rate as a proportion of the total number of children aged 12-17 reveals a higher percentage of Chenango County youth being arrested between the years 2013-2017 than in NYS as a whole. For the same time period, the average juvenile arrest rate in the county was 1.6% whereas the average juvenile arrest rate for NYS as a whole was 1.0%.[32]

Table 19. Chenango County Juvenile Arrest Rates by Type of Crime and Year

	2013		*2014*		*2015*		*2016*		*2017*	
	#	*% of Total*	*#*	*% of Total*	*#*	*% of Total*	*#*	*% of Total*	*#*	*% of Total*
Total Arrests	70	100%	53	100%	55	100%	81	100%	40	100%
Simple Assault	10	14%	5	9%	8	15%	10	12%	6	15%
Aggravated Assault	1	1%	0	0%	6	11%	6	7%	1	3%
Robbery	0	0%	0	0%	0	0%	0	0%	0	0%
Forcible Rape and Other Sex Offenses	4	6%	6	11%	7	13%	4	5%	3	8%
Other Personal	0	0%	0	0%	1	2%	0	0%	0	0%
Burglary	5	7%	7	13%	4	7%	4	5%	3	8%
Criminal Mischief	12	17%	15	28%	8	15%	26	32%	12	30%
Larceny	15	21%	11	21%	12	22%	16	20%	10	25%

[29] Table S0103, Population 65 and Older in the United States, 2012-2016 American Community Survey 5-Year Estimates
[30] https://measureofamerica.org/DYinteractive/#County
[31] Focus on the Figures: Disconnected Youth not in School or Working, The Chronicle of Social Change, https://chronicleofsocialchange.org/analysis/focus-on-the-figures-youth-not-in-school-or-working Retrieved 12/13/18
[32] Juvenile Justice Profile, NYS Division of Criminal Justice Services

	2013		*2014*		*2015*		*2016*		*2017*	
	#	*% of Total*	*#*	*% of Total*	*#*	*% of Total*	*#*	*% of Total*	*#*	*% of Total*
Stolen Property	0	0%	0	0%	0	0%	0	0%	0	0%
Other Property	2	3%	4	8%	0	0%	0	0%	0	0%
Weapons	2	3%	2	4%	1	2%	1	1%	0	0%
Drug	10	14%	2	4%	3	5%	7	9%	4	10%
Other	9	13%	1	2%	5	9%	7	9%	1	3%
Demographics										
Male	54	77%	39	74%	35	64%	58	72%	24	60%
Female	16	23%	14	26%	20	36%	23	28%	16	40%
Age at Arrest										
12 Years and Under	9	13%	10	19%	10	18%	17	21%	12	30%
13 Years	12	17%	11	21%	11	20%	6	7%	13	33%
14 Years or Older	49	70%	32	60%	34	62%	58	72%	15	38%

__Access to Communication Options__

Several focus group participants and key stakeholders noted that the county is challenged by a lack of consistent, robust cellular and internet service. Overall, Chenango County has relatively limited access to broadband internet service (77.1% of population has access) compared to New York State as a whole (97.9% with access). The bulk of those with access to broadband are limited to ADSL or satellite internet options.[33] As of December 2016, the FCC estimated that 94.4% of the Chenango County population had access to mobile LTE with a minimum of 5 megabits per second (mbps) download speeds.[34]

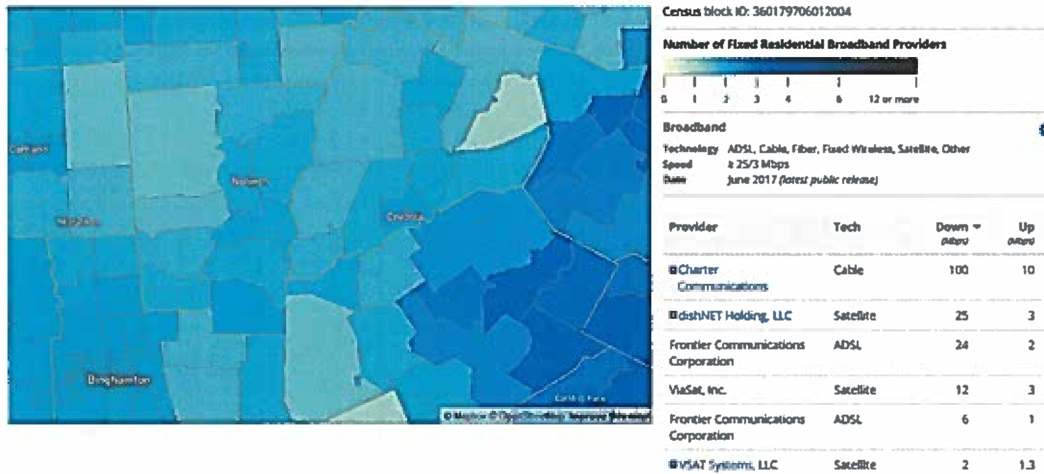


Table 20. Percent of Chenango County Residents with Access to Internet by Type

% of Pop. with Fixed 25 Mbps/3 Mbps	*% of Pop. with Mobile 5 Mbps /1 Mbps*	*% of Pop. with Fixed & Mobile*
75.80%	94.40%	73.90%

[33] Connect2Health https://www.fcc.gov/reports-research/maps
[34] 2018 Broadband Deployment Report, Appendix F1, https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report

Data from the Census suggests much lower connectivity among some specific demographic groups in the county.[35] According to this data, nearly a quarter of all households in Chenango County lack internet service. In addition, half of all households with incomes below $20,000 per year lack internet access.[36]

Table 21. Percent of Individuals by Internet and Computer Access

	No internet	*No computer*
By Age		
Under 18	10.7%	2.8%
18 to 64	8.7%	6.8%
65 and over	8.6%	28.1%
By Educational Attainment		
Less than HS	10.5%	31.6%
HS or some college	9.5%	12.2%
Bachelor's or higher	5.2%	4.2%
By Employment Status		
Employed	7.1%	4.4%
Unemployed	15.5%	11.5%
Not in labor force	10.1%	21.3%

Table 22. Percent of Households by Computing Devices and Internet Subscription

	Percent of Households
Has one or more computing devices	84.3%
Has desktop or laptop	76.8%
Has smartphone	55.0%
Has tablet or other portable wireless computer	42.5%
Other computer	3.6%
No computer	15.7%
Has internet subscription	75.9%
Dial-up	0.8%
Cellular data plan	34.5%
Broadband including cable, fiber optic, or DSL	66.6%
Satellite internet service	6.5%
Without internet service	24.1%
No internet subscription by Income	
Less than $20K/year	49.0%
$20K-$74,999/year	23.8%
$75K/year	7.2%

Incarceration

As of March 31, 2018, 154 people who had been indicted in Chenango County were currently incarcerated.[37] The number of incarcerated Chenango County residents compared to the overall population (0.4%) is similar to that of NYS (0.3%). The number of incarcerated individuals from Chenango County has increased steadily over the past 10 years, while the number of incarcerated individuals in NYS has steadily declined. The vast majority (N=146) of incarcerated county residents were male and nearly half (N=76) were under age 35. Over a quarter (N=41) were imprisoned for a crime related to drugs. In addition to incarcerated individuals, there were 98 other people in the Chenango

[35] Table S2802, Types of Internet Subscription by Selected Characteristics, American Community Survey 2013-2017, 5-Year Estimates
[36] Table S2801, Types of Computers and Internet Subscriptions, American Community Survey 2013-2017, 5-Year Estimates
[37] Inmates under custody: Beginning 2008. NYS Open data.

County jail in 2017 and 118 people under probation. Nearly 20% of people sentenced to probation in the county were arrested for a felony within three years.

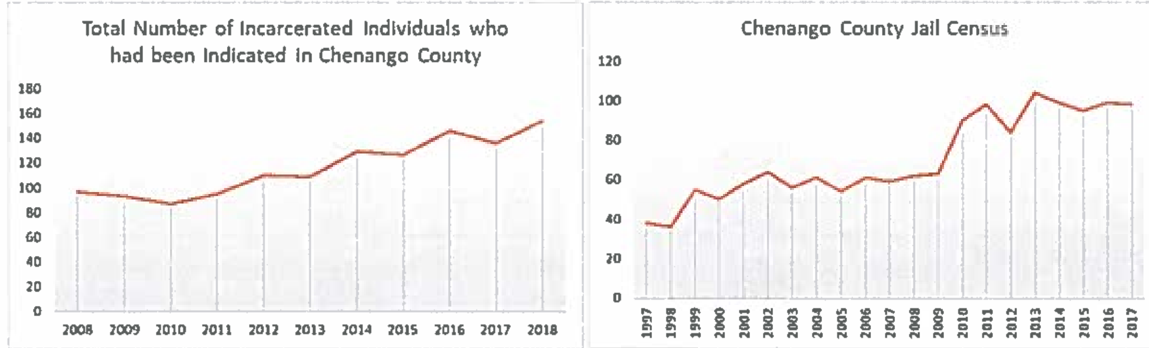


Table 23. Number of Chenango County Residents Sentenced to Probation by Year and Rate of Recidivism

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number sentenced to probation during year		146	133	160	147	139	171	155	125	132	118
Total percent arrested for felony in:	One year	9.6%	8.3%	9.4%	10.2%	4.3%	11.1%	4.5%	8.0%	6.8%	2.5%
	Two years	16.4%	16.5%	15.0%	15.0%	12.2%	17.0%	9.0%	15.2%	12.9%	
	Three years	21.9%	21.1%	20.6%	19.0%	15.1%	23.4%	12.9%	20.0%		

Access to Health Care

Health Insurance Coverage

A number of key stakeholders identified that the high number of Medicaid enrollees as one of the challenges facing the county. Data from DSRIP indicates that as of December of 2017, 29% of the Chenango County population (13,912 unique members) was enrolled in Medicaid.[38] This is slightly below the NYS ratio of 31.3% for the same time period. The number of people enrolled in Medicaid in Chenango County has increased by 15.8% since 2013 (12,003 unique members), a rate slightly lower than NYS's increase of 17.3%.

The increase in the number of Medicaid enrollees is reflected in the trend toward lower uninsured rates. According to Census data, the percentage of the county population without insurance declined from 14% in 2010 to the current low of 5.3% in 2017.[39] These data also show that as the percentage of people who are insured has increased, the distribution of people covered by different insurance entities has also changed.[40] In 2017, a higher percentage of Chenango County residents were covered by insurance that they purchased directly (such as through the state exchange) and through Medicaid only, than were in 2013. A greater number of Chenango County residents were also enrolled in more than one insurance plan in 2017. In contrast, in 2017 fewer Chenango County residents were covered by employer-based insurance plans than in 2013.

[38] Includes members who may also be enrolled in other public or private insurance programs
[39] Table S2701. Selected Characteristics of Health Insurance Coverage in the United States, American Community Survey 5-year estimates, 2013-2017
[40] Table B27010. Types of Health Insurance by Age, American Community Survey 5-year estimates, 2013-2017

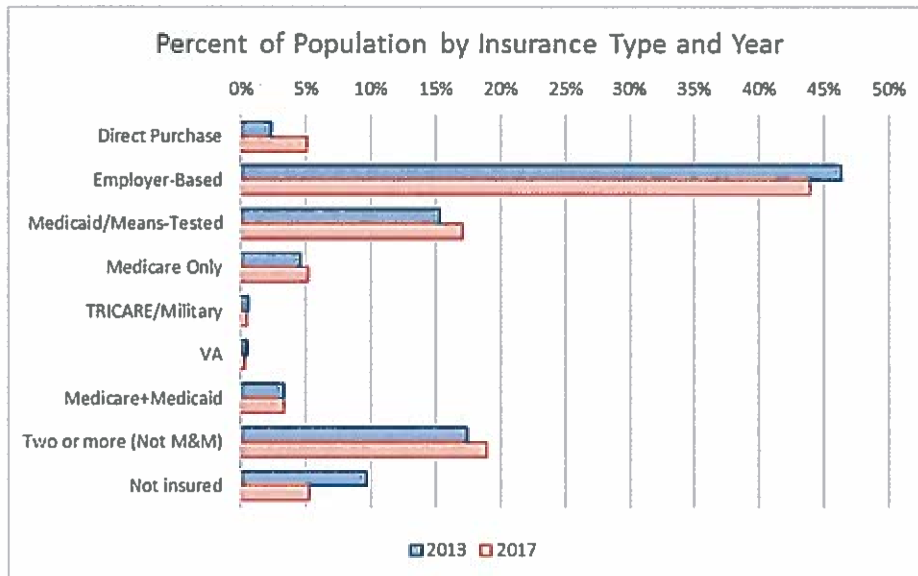


Table 24. Distribution of Chenango County Residents by Insurance Type and Year

	2013	*2017*	*Number Change*	*Percent Change*
Direct Purchase	1,164	2,455	+1,291	+111%
Employer-Based	22,963	21,156	-1,807	- 7.9%
Medicaid/Means-Tested	7,594	8,245	+751	+8.6%
Medicare Only	2,274	2,480	+206	+9.1%
TRICARE/Military	281	217	-64	-22.8%
VA	226	133	-93	-41.1%
Medicare & Medicaid (Dual Eligible)	1,614	1,576	-38	-2.4%
Two or more (Not Medicare/Medicaid)	10,266	10,959	+693	+6.8%
Not insured	4,777	2,532	-2,245	+47.0%

According to SPARCS data, CMH has experienced a decline in both the number of discharges and the dollars generated from those discharges. Between 2011 and 2016, the number of inpatient discharges declined by 29% and the total dollars charged declined by 8.7%. Stakeholders suggested that the increase of Medicaid enrollees as a proportion of patients accessing CMH has created a financial burden for the hospital. However, the percentage of total discharges for people enrolled in Medicaid has not significantly increased between 2011 and 2016. The shift in the mix of payers is most significant in the decline in Blue Cross/Blue Shield enrollees and the increase in Medicare enrollees (an insurance type that has a lower reimbursement rate). There has also been an increase in self-pay patients, which can result in increased usage of the CMH financial assistance program or unpaid debt.

Table 25. Percent of Hospital Inpatient Discharges by Payer Type and Year

Primary Payer	*2011*	*2016*
Blue Cross/Blue Shield	15.6%	13.1%
Federal/State/Local/VA	0.7%	0.6%
Medicaid	26.8%	27.0%
Medicare	46.4%	45.9%
Miscellaneous/Other	0.5%	0.4%
Private Health Insurance	6.2%	6.2%
Self-Pay	3.8%	6.8%

A handful of stakeholders noted that the prevalence of high deductible plans was a barrier for some county residents. One stakeholder stated, *"There's a group of people who have high deductible plans. It's pure finance – it's deciding between groceries and the flu shot."* Another stakeholder said, *'Insurance is an issue. Some people may not have out of pocket money. If you're on Medicaid, you can get that surgery, but others can't. We hear that a lot at this agency. It's sometimes an "us against them" between the poor and working poor.'* Another stakeholder noted that patients seeking mental health and substance use disorder services are required to pay a co-pay whether they are enrolled in Medicaid or in private insurance. The stakeholder said, *"Right now for anyone who is in Medicaid managed care or has a third party insurance arrangement, there are payment barriers. We see higher co-pays, higher deductibles and [this is a burden] for someone at the beginning of treatment when they need to be in the clinic one or two times a week. If that co-pay is $40 or $50 and that person is struggling to just meet their day to day expenses, it can be a real problem. At the beginning of the year when we see the deductibles kick in, oftentimes people need to be seen more often, but can't because they can't afford it. We try to work with them, but it does diminish the quality of care they get."* A focus group participant noted her own challenges with health insurance saying, *"I have taken a high deductible health plan to make it affordable. My out of pocket is $1,600. I will take my daughter [to the doctor], but I won't go myself unless my arm is falling off. I could certainly come up with the money if I had to, but I don't see the need for exploratory tests to find out nothing is wrong."* Other participants noted that they experienced challenges meeting the spend-down requirements to receive Medicaid benefits.

Access to Primary Care

Chenango County is designated a Health Professional Shortage Area (HPSA) when it comes to primary care (for the Medicaid-eligible population), dental health (for the low-income population), and mental health (for the Medicaid-eligible population). According to the County Health Rankings provided by the University of Wisconsin Population Health Institute, Chenango County had 18 primary care physicians in 2015. Chenango County's population-to-physician ratio of 2,710 to 1 is substantially higher than the New York State ratio of 1,200 to 1.

A number of stakeholders and focus group participants noted that the county's lack of primary care physicians is a challenge that is exacerbated by the high rate of physician turnover. A stakeholder said, *"There are not enough primary care physicians in the whole area. It's hard to recruit more providers here and if they are recruited, it's hard to keep them sometimes. Part of our access problems is not enough providers for the aging population."* One focus group participant noted, *"The pediatrics is hard. My pediatrician is trying to retire, so she is working on reducing her hours and it's so hard to get in. And people aren't taking new patients."* Another participant said, *"They just closed the Oxford clinic. They're tripling the one in Greene. Allegedly they're going to offer testing and MRIs and stuff like that. In Oxford, we don't have one."* A stakeholder said, *"We always have the situation of not having enough providers, especially primary care. We are a PCP shortage area and the issue is recruitment. We are not an area that is easy to recruit for."* Another stakeholder stated, *"It's not that easy to find a primary care physician. There are not a lot of choices. Chenango County isn't a destination of choice for MDs. You can't just go to a provider and say 'I'd like you to be my PCP.' You'll be told 'I'm sorry I'm not taking any patients.'"*

Access to Specialty Care

Of great concern to both focus group participants and key stakeholders is the lack of specialized providers in the county, particularly for mental health and dental care. While the county mental health clinic has open access and no wait list, stakeholders noted that there is a need for additional providers. One stakeholder said, *"I think the limited mental health contacts in this county [is a problem]. We have*

the clinic, but if someone doesn't want to go there, it's limited. I know some of my staff who would benefit [from] seeing a counselor but refuse to go to the mental health clinic because everybody knows where you're going. And the private counselors usually don't take Medicaid [and] some of them don't take any health insurance. That's problematic." Another said, *"We have a clinic that provides psychiatric services, but you can't just walk in and get counseling or psychiatric services. You really have to dig and find who's going to help you."*

Stakeholders also noted that the current lack of dental providers who accept Medicaid patients is creating a critical gap in services. One stakeholder said, *"Right now we have a crisis with dental services for people who use Medicaid. We have no providers that take Medicaid dental. People are going to have to travel for that."* This concern was echoed by other stakeholders and focus group participants as well. One participant said, *"There's not a dentist that takes Medicaid. Well, there's one, but they're not taking new clients, there's a wait list. There's one provider, but it's impossible to get there."*

Data support the concerns of stakeholders and focus group participants about the lack of mental health providers and dental providers. The County Health Rankings show that Chenango County's mental health provider ratio of 530:1 and dentist ratio of 2,860:1 are far below NYS's respective ratios of 390:1 and 1,240:1.

Some focus group participants noted that the lack of other types of specialists locally and regionally affected the wait times for accessing appointments. One focus group participant, commenting on a family member's experience said, *"She's having pulmonary problems. She had an x-ray, but the follow-up is not fast. She's not breathing well but the appointment is [two months away]. My question is: are there enough care people to provide the program efficiently? At Bassett, I found they had two pulmonary doctors. We live in Chenango County, but there are only two doctors for the whole Bassett health care system."* Some stakeholders identified that the crucial specialty care challenges included dialysis, cardiac, oncological, and otolaryngologic care. A stakeholder said, *"We can't afford a lot of specialists on staff. So that means that people have to go elsewhere for specialty care. This is not convenient if they don't have reliable transportation or family members or friends. We are limited with specialty care for geographical reasons and the expense of specialists. We do the best we can with access."*

Stakeholders and focus group participants also stated that the geographical distance between primary and specialty care could result in difficulties with continuity of care. One stakeholder said, *"In the outskirts you have Bassett health homes, but then there are UHS providers. The communication has to happen better between those two organizations. It creates difficulties with continuity of care. If you have to wait for records between those two, the providers miss things."* Focus group participants noted that having more assistance coordinating care would be helpful, particularly for older adults. One participant said, *"I don't know what they're using these days, but having a case manager within the health system for people would be useful. It's been talked about for a long time. We were going to have people in place to make sure people don't fall through the cracks, but I don't think it's happened. Especially with older people, but it can be any age. If you don't have an advocate sometimes you get lost. Even for people who are advocating for themselves, they're in the middle of some kind of crisis and that's the most important thing going on. They don't always remember to ask questions and don't really hear the answers because they are focused on 'am I going to die'. That kind of health advocate was supposed to be part of this plan and I don't really see that happening. People get lost along the way. I can advocate for myself, but I've had situations where I'm supposed to get a call for results and I have had to call back two times to get that."*

Hospital Care

Stakeholders and focus group participants noted that one of the key strengths within the county's health care system is the presence of the hospital. One stakeholder said, *"I would say one of the greatest strengths would be the knowledge and the access to health care in our small community. It's not uncommon that the access in rural communities would be limited, but the fact that we're still able to have a hospital with a wide variety of services available to our community is a blessing. If there's an emergency, there's that safety net. If there are individuals that cannot travel, we know that we at least have those services available at our fingertips. That's very important, knowing that CMH is a not-for-profit with those challenges, and that it's open and accessible and somewhat growing, knowing that they have some projects planned, and they are not waving the white flag by any means. They are committed and moving forward."* Another stakeholder said, *"I think it's really great for a small rural community that we even have a hospital. That's foremost in my mind. If we didn't have a hospital here, I'm sure our mortality rates would go up. People would have to go to Binghamton or up to Hamilton and that's a hike."* Another stakeholder agreed, saying, *"I think whether it's working well or adequately, I think having the hospital viable in Norwich is critically important and sustaining that facility and services is critical. To me, that's the highest priority."* Stakeholders also noted that the hospital's connection to the larger UHS system is beneficial to the county, saying, *"I know that if the hospital can't handle a situation, they quickly identify another provider that can. And they will move the person to a hospital system that can better meet their needs pretty fairly quickly."* Focus group participants agreed that the presence of the hospital was of great benefit to the county. One participant shared, *"I think we're fortunate to have a hospital here."* Another said, *"Anybody I've ever dealt with at hospital is very friendly and very nice and very patient oriented. I think that's a positive. I know that just from what I've done there recently with blood-work and registration, those people are fantastic. I always recommend the lab here very highly."*

Emergency Care

A number of key stakeholders noted that limited access to an urgent care facility, primary care and specialist care resulted in inappropriate use of the emergency department. One stakeholder said, *"I'm worried that we don't have an urgent care facility. We have so many families using the ER inappropriately. It's a high cost for them and it's an inappropriate use of that kind of facility. It's bad news all around. I feel there's a better way for that to occur such as an urgent care or walk-in clinic. That doesn't exist here, but would be well suited to the community. Right now, people have to go to Chenango Forks, Hamilton, or Oneonta and with transportation challenges, it doesn't make sense."* Another stakeholder said, *"I would say hours are tough because if it's 8pm, a walk-in center might not be open, [so] then you have to go to the ER. It may not be an emergency, but it's still something that needs to be looked at whether it's a significant ear infection for a child. They can't get through the night and next day until the walk-in center re-opens. But it isn't on [the] same level of ER."* Another stakeholder stated, *"What's frustrating is you see a billboard that says same-day appointments, but when you call, you can't get same-day. Even people who work at the hospital have difficulty getting in. It's a huge deterrent. It may not be streamlined enough to help."* Another stakeholder mentioned, *"We no longer have a walk-in clinic in the county and the ER is over utilized by clients that may not need emergency services."* A participant added, *"I just found out the ENT works 1.5 days week and is booked [three months out.] I asked where would urgent care be for ENT and was told Binghamton, Utica, and Oneonta."*

Focus group participants in particular were concerned about the lack of an urgent care or walk-in facility in their county. One participant said, *"The only real issue is that if a doctor can't get you in, we don't have a local walk-in. The only other option is the ER and everybody goes there and you're waiting forever. We usually go to the ER. Based on gas, by the time you get to urgent care in another county it's*

not worth the drive." Another participant said, *"[It's a challenge] if your child wakes up sick with an infection or strep and you can't get into a doctor. Then you have to go to the ER because waiting two weeks to get health care isn't possible. We no longer have a walk-in or anything."* Another participant said, *"I would have to be pretty much dead before I'd go to the ER because of the cost of the copay to us and there isn't an urgent care. There's nothing else here. If something was to happen to you on the weekend and you couldn't get into the doctor, you're [out of luck.] That's not a barrier for people with Medicaid because they don't have a copay, but for people with insurance, emergency copays are substantial. You have to make that decision on whether it can wait until Monday. We drive down to the walk-in in Binghamton."* A low-income parent said, *"There's no walk-in center in the county. I can't get in to my doctor [and so] I have to go outside county. The Fast Track [at the hospital] is supposed to be like a walk-in center, but it's a joke. It takes forever and that's not realistic if you're going in with a one-year-old. It's even worse if I have to go in without my husband and with all three kids. It's not an option. They need a walk-in center or an urgent care center."* Another participant stated that the wait times at the emergency room were burdensome. She said, *"My daughter sat for an hour and a half waiting to be seen with a very serious asthma attack. She ended up taking Benadryl to calm it down and then they said nothing was wrong. When she followed up with her doctor and he said, 'why did you go there?' But asthma isn't something you mess around with."*

Data show that the potentially preventable emergency room visit rate for Medicaid recipients is much higher in Chenango County than the rate of visits for the NYS Medicaid population as a whole. The county Medicaid rate of usage is also higher than the county's all payer rates suggesting that the Medicaid population in Chenango County is over-using the emergency department. The all payer rate in Chenango County is also higher than the state rate, suggesting that other populations in the county are also potentially misusing the emergency department.[41]

Table 26. Potentially Preventable Emergency Room Visits – Medicaid Only

Year	Chenango County				NYS
	Observed rate per 100 people	*Expected rate per 100 people*	*Risk adjusted rate per 100 people*	*Difference Observed/Expected*	*Observed rate per 100 people*
2011	47.48	27.31	51.32	20.17	29.52
2012	49.51	29.96	51.42	19.55	31.12
2013	42.43	28.17	46.08	14.26	30.59
2014	50.79	28.69	54.47	26.12	30.77

Table 27. Potentially Preventable Emergency Room Visits – All Payers

Year	Chenango County				NYS
	Observed rate per 100 people	*Expected rate per 100 people*	*Risk adjusted rate per 100 people*	*Difference Observed/Expected*	*Observed rate per 100 people*
2011	37.74	17.27	51.29	20.47	23.47
2012	37.63	17.4	50.9	20.23	23.53
2013	33.04	17.18	44.48	15.86	23.13
2014	39.85	19.52	49.53	20.33	24.26
2015	41.07	20.28	50.52	20.78	24.95

[41] NY Open Data

The number of people served by CMH's emergency department remained relatively flat over time until 2014 when the hospital discontinued the walk-in center.

Table 28. Total People Served in CMH Emergency Department by Year and Type of Service[42]

	Emergency Room	*Walk-In Center*
2007	14,177	9,447
2010	16,211	9,849
2011	16,855	9,509
2012	16,183	10,342
2013	15,059	8,755
2014	18,183	-
2015	18,495	-
2016	17,955	-
2017	18,439	-

Access to Home Care Providers

Focus group participants and key stakeholders noted a lack of home care providers in the county. One participant said this is of particular concern if the county wishes to help people age in place. She said, *"I have a husband with mild memory issues. If we should all be so fortunate to live so long, but we're going to have some issue of some sort. Most of us feel that we don't want a nursing home. Chenango County is sorely lacking in services. I belong to the Alzheimer's group, but there's not anything in the county, there's no help. They ask if you're really poor and need heating assistance. But if they want to keep tax paying people in this county, they have to start thinking about aging in place."* Another participant said, *"If you live further out, they won't even come out. Our neighbors tried to get someone to come in a few times a week but were not able to get any of the agencies to want to come out as far as we are. The farm was too far out. They had to find a local person who had done that kind of work in the past."* Another participant said the lack of support in finding an aide was a challenge. She said, *"The agencies just give you a list. It's all on you to find someone."* Another focus group participant said she had asked for help, but was not eligible for support. She said, *"There are a lot of things I can't do in my house anymore and they didn't seem to see it. They looked at my house and said there's nothing wrong. I like a clean house, but they apparently did not see anything. They ask if you need help, but then don't give it."*

A key stakeholder working in the home care industry agreed that there are challenges in staffing home care positions. She said that despite the worker shortage for registered nurses (RNs), their organization had been successful in recruiting for that position. She explained that while they were currently fully staffed for nurses in Chenango County, they were *"...not for home health aides. Chenango County has been one of our most challenging areas."* She remarked on the need for a more robust pipeline for the entire healthcare workforce saying, *"We've offered to put candidates through training programs, but those are limited and don't tend to be offered frequently or aggressively recruit participants."* She also noted that people requiring home care have more acute issues than in the past. She said, *"People go directly from acute to home health. There's no intermediary. Nationally most people go from acute care to sub-acute care then home. So we are seeing a very sick population. Cardiac, metabolic disorders, and wounds peak in our region so the need for RN services is pretty high."* She also said there could be significant wait times for home health care. She said, *"For incoming referrals, we've had to triage based on medical need, and I'm sure a large number of these people who have been home without care ultimately end up back in the hospital. I have no doubt that it's a contributor to potentially preventable re-admissions. We hear this more often than we'd like."*

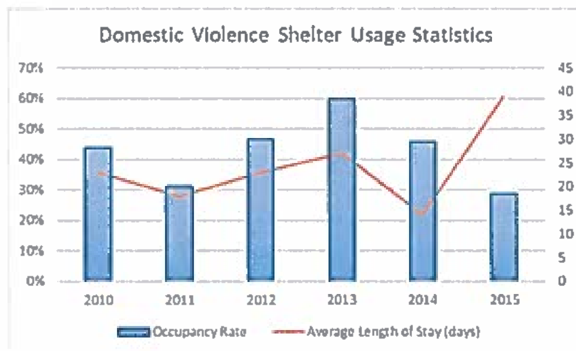
[42] CMH

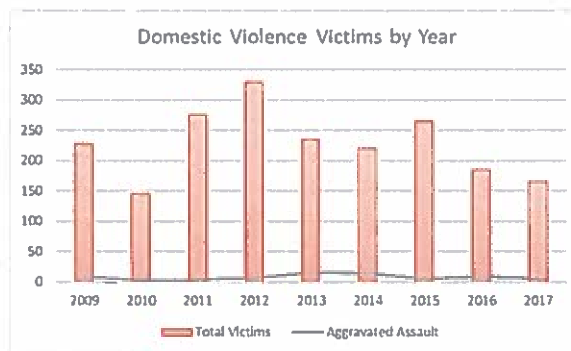
Focus group participants also noted the lack of respite care availability in the county. One participant shared, *"One other gap in service I see [is a lack of] relief services for caregivers. I think it's a much hidden population and probably much larger than the numbers we might think it is. It can be overnight relief. There are a lot of people living in their own homes and being taken care of by a spouse or another family member. I think there's a huge need for that relief service [so the caregiver can] get away from that house and that stress. I think that's a big gap in services in our community."*

School Based Health Clinics
Chenango County is home to two school-based health clinics. Focus group participants and stakeholders agreed that these clinics are particularly useful and expressed a desire for more of them. One stakeholder said, *"The school-based health clinics that provide care to kids solves the problems of transportation and insurance. Not only is there a provider, there is also a counselor every day and a dental hygienist. It is really the best bang for buck. And it gets the kids to start developing good habits. [One clinic] is also serving newborn age and up. Parents are so grateful because they're not losing their jobs to take their children to the doctor."* Stakeholders and focus group participants noted that the loss of some school-based health centers was a detriment to the county.

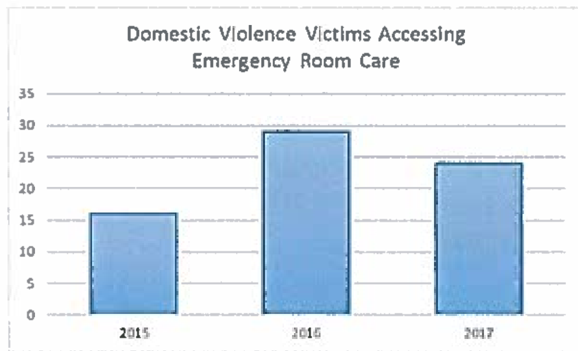
Neighborhood and Built Environment

Crime
The only crime related issue noted by stakeholders and focus group participants was domestic violence. Stakeholders and focus group participants said the lack of a domestic violence shelter in the county had led to an increase in incidents in recent years. Chenango County's 8-bed domestic violence shelter was closed in 2015 despite persistent usage. In 2017, a total of 165 people in Chenango County were reported as victims of domestic violence through the criminal justice system,[43] down from previous years. In contrast, data show an increase in domestic violence patients accessing emergency room care since the closure of the domestic violence shelter. Victims may be choosing not to press charges if they have to return home, rather than to a shelter, which may account for this discrepancy.

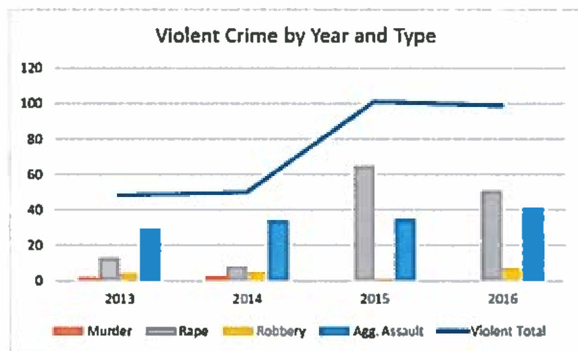


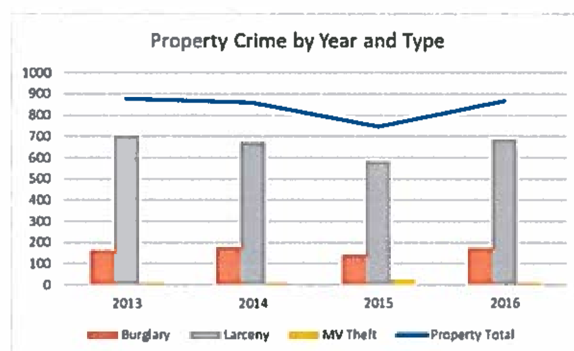


[43] Domestic Violence Victim Data by County, Division of Criminal Justice Services, http://www.criminaljustice.ny.gov/crimnet/ojsa/domestic-violence-data.html



Chenango County experienced an increase in violent crime during 2015 and 2016.[44] This surge was driven primarily by increases in rape and aggravated assault. Property crime rates have remained relatively flat.





While total arrests have declined by 25% over the past several years in Chenango County, there has been a dramatic increase in drug arrests, both felony and misdemeanor.[45] Many stakeholders and focus group members commented on the challenges illegal substance use poses to the community, though none mentioned the impact of drugs with respect to crime or how it affects the community environment. The concern expressed by participants focused exclusively on the health of the individual and the impact on the family.

Table 29. Arrests in Chenango County by Type and Year

	2008	*2017*	*Percent change*
Total Arrests	1,055	782	-25.9%
Felony Total	209	240	+14.8%
Drug	14	65	+364.3%
Violent	37	44	+18.8%
DWI	22	14	-36.4%
Other	136	117	-14.0%
Misdemeanor Total	846	542	-35.9%
Drug	38	59	+55.3%
DWI	203	83	-59.1%
Property	232	190	-18.1%
Other	373	210	-43.7%

[44] NYS Division of Criminal Justice Services
[45] NYS Division of Criminal Justice Services

Housing

A handful of stakeholders and focus group participants noted that health is also affected by substandard housing in Chenango County. One stakeholder said, *"I think a lot of our health care related issues are that people don't have quality living arrangements. And some of those people are families with children."* A focus group participant said, *"Some of these houses, you can't insulate them. From the inside you can't blow insulation in because it's that plank between the clapboard and foundation."*

In the *2017 OFC Needs Assessment* survey, 22% of respondents described their housing condition as fair and 5% described it as poor, indicating that more than a quarter of these families have substandard housing.

Housing quality issues may be exacerbated by the lack of available housing in the county. Of the vacant housing units in Chenango County, over half are for seasonal or recreational use. Only 2.5% of housing units are available for rent or for purchase.[46] Individuals hoping to purchase a home in Chenango County face a significant challenge with a homeowner vacancy rate of only 2.4%. Renters have potentially more options with a 5.1% vacancy rate.[47]

Table 30. Vacant Housing Stock by Status

	Estimate
Total:	4,980
For rent	269
Rented, not occupied	86
For sale only	372
Sold, not occupied	274
For seasonal, recreational, or occasional use	2,594
For migrant workers	6
Other vacant	1,379

Stakeholders and focus group participants also noted that the absence of supportive housing was a barrier to health for some residents. One focus group member noted that the lack of supportive housing for people with developmental disabilities was a challenge for his family. A key stakeholder agreed saying the county had a pressing need for Individual Residential Alternative (IRA) beds. She said, *"I think there is a housing need. I think for individuals that want either a supervised apartment or a supportive apartment, there aren't enough programs for that. I know that there aren't enough IRA beds. Somebody has to pass away for us to find somewhere for them to live. I know that Chenango County was recently awarded a proposal they had given for development and they're excited about that, but I know by the time they get it all approved and situated, all those beds will be taken. I know there are families that are aging and don't have somewhere to put their person and until they're in a nursing home they won't move to the top of the list. There are not enough beds and not enough quality programs. And if someone wants to live alone or an alternate lifestyle such as living with a family member, support is hard to find. The front door initiative has an excellent team, but they serve six counties so they're stretched thin. The idea is that the person should choose where, who they live with, and how they live. But it's tough with limited resources."* Another stakeholder said, *"[The county has a] large percentage of adult-aged individuals who are [operating] cognitively at a lower level. So they're living often times in section 8 housing, others are in the Springbrook home and we're glad that they have the independence. But then what's the follow-up procedure about holding them accountable for having the adult behaviors? There's*

[46] Table B25004. Vacancy Status
[47] Table CP04. Comparative Housing Characteristics

a lack of case management. I don't want to make a blanket statement, but it seems to me that some of the individuals that I know are a real burden for their families. Here we have an 85-year-old woman trying to convince her 50-year-old daughter to take her medication. It's a tremendous stressor for many of our elderly population that have children that fall into that category. And probably overlooked too."

Homelessness

County specific data on the homeless population is unavailable. Chenango County is grouped within the NY-511 Binghamton, Union Town/Broome, Otsego, Chenango, Delaware, Cortland and Tioga Counties Continuum of Care (CoC). The number of homeless individuals in the NY-511 CoC in 2017 was 308. Of these, 62 individuals (20.1%) were unsheltered at the time of the Point in Time Survey.

While the number of Chenango County residents who are homeless is unknown, a handful of stakeholders and focus group participants suggested that the lack of a homeless shelter or homeless services in the county was a pressing issue. A stakeholder said, *"The people we're meeting [that are homeless], I think they're, in general, lacking a sense of purpose for their lives. They turn to drugs because what else am I going to do. They get caught in a trap and don't know how to break free from that. It's tough in our area because if someone is homeless, there are huge barriers for getting that person help. We struggle to get the basic needs met. When you're homeless, don't have a job, don't have food, warm clothing, the drugs seem like a really good escape. We've been working with a ministry delivering backpacks filled with toiletries for recently released inmates. I was getting calls for a week straight. The woman who was in charge of helping these individuals back in the community was asking about housing for these individuals. We don't have the financial means or resources to do that. So there's nowhere to send them. And I think often these individuals are enrolled in mental health and substance abuse services. It's a real challenge in this area."* Another stakeholder said, *"At one of our last meetings these two young people showed up. We thought they wanted to join, but they were just going into the church because they had nowhere to go. It was cold and they needed somewhere to sleep. They had been kicked out of her grandmother's house because her boyfriend is black. They had a multitude of issues but did not seem to be active substance users. We tried to figure out what to do with them. We put them in a motel for night. We took them to Catholic Charities and they said they had nothing. We took them to the drug and alcohol clinic and they turned them away. Even though this girl was in their system because she had mental health issues, we ended up taking them back there a couple times. They have no place to go and we had no idea what to do. They told her to go back to her grandmother's. That's not really helpful. In my mind, if you don't help people like this...we knew what to do if they were addicted to heroin, but they weren't. But they could end up being that. In that situation they might turn to that to medicate the issue. We could have taken them to Ithaca or Binghamton, but I hate to take people out of their community. We're actually in communication with people who should know what to do and we were not able to get them help. So how does somebody with no resources, no knowledge get help?"* One focus group participant said, *"They have strict guidelines on who is homeless. It's different than what we'd generally think of it. If you have a family member or friend, or $70 in a bank account to get a hotel, you have to have used all your resources and be completely indigent and have no money to receive any services. During the summer if you have a car or a tent, they say that's a resource."*

Transportation

Transportation was, by far, the most mentioned social determinant of health by both focus group participants and key stakeholders. Feedback suggests that transportation restrictions prevent residents from accessing primary care, specialty care, ancillary support services, and resources for basic needs.

Census data indicate that 7.7% of households in Chenango County do not have access to a vehicle. More than 1 in 5, or 21.8%, of renters do not have a vehicle compared to only 3% of homeowners. When examining this further by age, 13% of people under age 35 do not have access to a vehicle and 8.6% of people aged 65 and over do not. Given the rural nature of the county, the significant portion of households without access to a vehicle suggests a need for transportation support to access both health care as well as other needs. In the *2017 OFC Needs Assessment* survey, 81% of respondents said they had access to a working vehicle and 28% said having reliable transportation was one of their biggest concerns for their family's future.

There are some transportation options for households without vehicles, but stakeholders and focus group participants noted that these options have limitations that can create additional challenges. Focus group participants shared that they had experienced several problems with transportation offered by Medicaid. One participant said the requirement for advance scheduling was a burden at times. She said, *"If you make an appointment and need to get there next day, you can't get transportation. They need three days notice and won't make exception. And sometimes they say they didn't get your request. I know a lot of people wait for a ride, but they don't show up. Or the doctor's office won't call to confirm the appointment."* A stakeholder noted, *"Even if they are going to pay mileage, you still have to find someone to get you there. A lot of people don't drive, the elderly, some don't have a license, or don't have car. Being rural is a challenge in and of itself."*

Other focus group participants noted that the Medicaid transportation is limited in terms of the types of places it will take clients to. In particular, day habilitation programs and support groups are not considered medical appointments and are not eligible for transportation support. Focus group members said these limitations prevented several people from receiving those services. A stakeholder described, *"A lack of transportation makes it difficult for people to get to appointments. Here at the hospital, even if somebody is being discharged and going to the nursing home two miles down the road, it's over a $250 cost for them to get mobile life which is the only provider for stretchers. And Medicaid is the only one who pays for it. The nursing homes don't pick up people and you have to have a credit card up front. Also, if people come to the emergency room by ambulance, they can't get home by ambulance. A lot of families don't have transportation resources. It's a huge barrier."*

Accessing services in other counties can also be problematic for people in need of transportation. One parent said, *"Transportation won't go across the county line. My son is blind and gets services at AVRE. We would have free transportation in Binghamton, but they won't come beyond Chenango Forks. It's 80 miles a day transporting him to work every day."* Other participants noted the challenge with crossing county lines. One focus group participant said, *"My friend has to have dialysis three times a week. Her grandmother drives her three times a week to Oneonta. There's no transportation that will go across county lines."* Focus group members also said there are similar transportation and financial challenges among some patients who are not eligible for Medicaid transportation services. One participant said, *"If my memory is any good for this, [transportation services] were for very specific people, mental health diagnoses, chronic diseases, but that doesn't take into account all those regular people who have a sudden event happen and need that kind of follow-up. Medicaid has become huge in terms of the number of people who are eligible. And if you're eligible, the system has a whole lot of services. We still have the segment of people who are not Medicaid eligible, but may have just as many needs, in this community. And they lack the services as well as Medicaid. We have people with Medicaid who have no trouble getting help. They can call for Medicaid transportation, but if you're not Medicaid eligible and don't have transportation, basically you're screwed. That's a big disconnect – the people not eligible for services but who can't afford transportation either."* A stakeholder agreed saying, *"Transportation is the*

hardest, especially because there are not specialty offices here. And county boundaries are difficult. With the Medicaid population, they need forms approved before they can get transportation and they struggle getting paperwork done. And the elderly group that doesn't want to drive, don't feel safe in the winter, but only have Medicare. Then the group of people who just don't have a car who are mostly middle-low income."

Focus group participants noted that the public bus system's limited routes and time frames prevent people from accessing services as well as other resources, such as the grocery store or food pantries. One participant said, *"My church has a free giveaway for fresh food, but you have to be able to get there and back on your own. They don't deliver anymore. Now they have to have transportation. A lot of people used to be served, but don't get served anymore because they can't come."* One participant said, *"With the city bus, the earliest one that comes to Graceview is 9:59am and a lot of times something is going on [at the Chenango Club] in morning. I can't get here and I feel like I miss a good part of the day. I feel like I miss quite a bit of what's going on."* Other participants said that the bus system often cancels routes without notification.

Chronic Disease

Chenango County continues to rank in the lowest quartile for several cardiovascular disease mortality indicators including cardiovascular disease in general, diseases of the heart, coronary heart disease, and heart attack. The rate of premature deaths in Chenango County from cardiac related chronic diseases is substantially higher than in NYS (excluding NYC).

Table 31. Cardiovascular Disease Indicators[48]

Indicator	*County Rate*	*NYS Rate excl. NYC*	*Sig. Dif.*	*County Ranking Group*
Cardiovascular disease mortality rate				
Age-adjusted	330.9	221.4	Yes	4th
Premature death (aged 35-64 years)	148.0	99.3	Yes	4th
Pretransport mortality	330.2	167.7	Yes	4th
Disease of the heart mortality rate				
Age-adjusted	282.2	177.2	Yes	4th
Premature death (aged 35-64 years)	123.3	81.6	Yes	4th
Pretransport mortality	293.7	139.4	Yes	4th
Coronary heart disease mortality rate				
Age-adjusted	222.8	124.3	Yes	4th
Premature death (aged 35-64 years)	98.7	60.7	Yes	4th
Pretransport mortality	240.2	101.7	Yes	4th
Coronary heart disease hospitalization rate				
Age-adjusted (2012-2014)	34.7	29.6	Yes	4th
Heart attack mortality rate				
Age-adjusted (2012-2014)	22.9	15.4	Yes	4th
Heart attack hospitalization rate				
Age-adjusted	128.4	32.3	Yes	4th
Hypertension hospitalization rate per 10,000 (any diagnosis) (aged 18 years and older) (2012-2014)	598.7	546.4	Yes	4th
Hypertension emergency department visit rate per 10,000 (any diagnosis) (aged 18 years and older) (2012-2014)	1,377.5	960.8	Yes	4th

[48] County Health Assessment Indicators, NYSDOH, 2013-2015

Healthy Eating

Many focus group participants noted several challenges related to healthy eating and food security. Participants said that healthy food was expensive and presented a barrier to healthy eating. A low-income parent said, *"We manage a healthy diet. Aldi's opening up helped a lot. But we barely can afford to eat healthy."* Other participants said that their community lacked a grocery store which created a challenge in accessing fresh produce. One participant said, *"Access to healthy foods is hard when there's no grocery store. There's no local store here in New Berlin."* Participants also noted that transportation posed a significant barrier in accessing food. One participant stated, *"If you do ride the bus, you can only take two bags that have to stay on your lap."* An older participant said, *"It's awful hard for me to carry a gallon of milk and I use about a gallon a week. It's hard to carry it from the bus stop. And we can't bring a cart on the bus."* Another participant shared, *"We have people who don't drive anymore so access to quality foods and fresh foods is a challenge."* One participant noted that the distance to food pantries was also a challenge for food insecure residents. She said, *"The distance to the food pantry has been a concern for me. I've seen one gentleman who walks to Greene and then carries the groceries home. That's four or five miles."*

Data from the NYS eBRFSS estimates that over a third, 34.7%, of Chenango County residents consume less than one fruit and one vegetable per day. This rate is higher than both the NYS rate of 31.2% and the Prevention Agenda goal of 29.6%. Community members suggested that outside of the main population centers, access to healthy food is a challenge for many residents, especially for people without adequate transportation such as older adults and people with low incomes.

The number of grocery stores in Chenango County remained flat over recent years while the number of fast food restaurants increased by nearly 37% between 2009 and 2015.[49] Farmers markets have increased in recent years, but community members noted that the markets are difficult to access if you have transportation issues. Seniors eligible for the Senior Farmers Market Nutrition Program said they were unable to use the vouchers for produce because they either did not have access to farmers markets or the vendors at the market did not accept the coupons.

Table 32. Food Access Indicators

	2014/2015
Fast-food restaurants	26
Population/low-access to grocery store	2091
Number of Grocery Stores, supercenters, club stores	12
Farmers' Markets	5
CSA farms	12

Across the eight public school districts in Chenango County, the average daily student participation in school breakfast was 40.9%[50] and 71.5% for school lunch.[51] The county's participation in school meals far exceeds the average daily participation for NYS, which has an average participation rate of 21.3% for breakfast and 64.6% for lunch. Four Chenango County school districts have taken advantage of the Community Eligibility Provision (CEP) through the National School Lunch Program (NSLP) which allows districts and schools to provide universal breakfast and lunch. The universal meals offer a unique opportunity to reach a large and potentially vulnerable population with healthy, nutritious meals.

[49] USDA Food Atlas
[50] As of October, 2017
[51] Child Nutrition Services, New York State of Education

Opportunity

Accessing CEP: The Oxford Academy primary and middle schools are currently eligible for this program. The district could choose to apply for the CEP for those schools individually.

Improve Quality of Meals: While the NSLP has specific guidelines to ensure the nutritional quality of the foods served at schools, there is significant opportunity to enhance that quality further by offering made from scratch foods, reducing reliance on processed food items and offering more fresh produce options. Increasing quality of meals often increases participation in meals, which ensures the financial stability of the food services program as well as helping to guarantee that vulnerable students have greater opportunities to access healthy foods.

Data from the eBRFSS shows that 29.6% of Chenango County adults consume one or more sugary drinks daily. This is down from 32.9% in 2014, but is still significantly higher than the NYS rate of 23.2% and the Prevention Agenda goal of 22.0%.

Cornell Cooperative Extension of Chenango County supports several community gardens and offers gardening and food preservation classes. In addition, they manage the Eat Smart New York outreach program and classes. A key component of the Eat Smart New York classes for children is that they focus on understanding and reducing sugary drink consumption.

Food Security

The food security rate in Chenango County, 82.3%, is higher than both the NYS rate of 76.4% and the Prevention Agenda goal of 80.2%.[52] Despite the higher rate of food security, both stakeholders and focus group participants noted that food insecurity in the county is a barrier to health for some residents.

A key to food security for low-income households is participation in the Supplemental Nutrition Assistance Program (SNAP). The USDA estimates that 83% of all eligible individuals in the nation received SNAP benefits in 2015. Participation rates for the elderly and for individuals with incomes above the poverty threshold, yet still eligible, remain low at 42% and 40% respectively.[53] In Chenango County, 14.0% of residents and 18.1% of households receive SNAP benefits. According to Census data, of the 2,956 households with incomes below poverty in 2016, only 1,775, or 60% of households, received SNAP benefits.[54] This is higher than the NYS rate of 52.6%. Despite higher than average participation in the county, some stakeholders and participants noted that SNAP benefits are insufficient to provide adequate and healthy foods. One stakeholder said, *"I think it's harder for our clients. Their income is limited and we all know buying fruits and veggies is a more expensive proposition. Most of them have food stamps, but most of my clients are single-person households and they don't get a lot of money."* A focus group participant shared, *"For me, for instance, I have a daughter. It's hard to get her food all the time. I get $15 in food stamps. It's not enough. WIC doesn't cover everything per month with all she needs."*

[52] eBRFSS

[53] Trends in USDA Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2010 to Fiscal Year 2015 (Summary), Food and Nutrition Service, USDA, June 2017. Retrieved from: https://fns-prod.azureedge.net/sites/default/files/ops/Trends2010-2015-Summary.pdf on November 23, 2018

[54] Table B22003, Receipt of Food Stamps/SNAP in the Past 12 Months by Poverty Status in the Past 12 Months for Households, 2012-2016 American Community Survey 5-Year Estimates

Table 33. Percent of Households Receiving SNAP Benefits by Type of Household[55]

Percent receiving SNAP Benefits	*Chenango County*	*New York State*
All households	18.1%	15.4%
Households with children under 18	21.4%	22.3%
Households with children under 18 with female head of household	42.5%	44.4%
Households with one or more persons aged 60 and over	15.4%	15.8%
Households with one or more persons with a disability	30.5%	29.9%
Households with one or more workers in the past 12 months	12.6%	13.5%

Opportunity

Increase SNAP Participation: A focus on increasing participation in SNAP, particularly among seniors, can have the positive effect of improving food security while also freeing up income for other needs such as prescription medications and utilities.

Feeding America estimates that 21% (N=1,138) of the food insecure households in Chenango County are ineligible for federal nutrition assistance programs such as SNAP, WIC, and NSLP.[56] Many of these households rely on charitable food options such as food pantries and soup kitchens. The Food Bank of Central New York (FBCNY) supports 14 food pantries and two soup kitchens throughout Chenango County. From July 1, 2017 to June 30, 2018, the food pantries in Chenango County served approximately 3,362 people per month.[57]

Food Insecurity and Children

Feeding America estimates that nearly 20% (N=2,060) of children in Chenango County are food insecure.[58] The bulk of those children (84%) are income-eligible for nutrition programs such as the free and reduced lunch program, and approximately half receive food from a pantry or soup kitchen during the month.

Table 34. Percent of Children Receiving Food Support by Type and Region

	Chenango County	*New York State*
Percent of children under 18 receiving SNAP benefits[59]	23.2%	25.7%
Percent of children K-12 eligible for free lunch[60]	42%	48%
Percent of children K-12 eligible for reduced price lunch	7%	5%

Table 35. Number of People Served by Charitable Food Programs by Age Group

Program Type	*Avg. # of Children served monthly*	*Avg. # of Adults served monthly*	*Avg. # of Seniors served monthly*	*Avg. # of all people served monthly*
Food Pantry	1,058	1,943	361	3,362
Soup Kitchen	73	214	191	478

Food Insecurity and Seniors

A relatively small number of seniors are served by food pantries (N=361) compared with the estimated number of seniors who are at risk for food insecurity (N~3,274).[61] In addition to food pantries, food

[55] Table S2201, Food Stamps/SNAP, 2012-2016 American Community Survey 5-Year Estimates
[56] http://www.feedingamerica.org/research/map-the-meal-gap/2016/overall/NY_AllCounties_CDs_MMG_2016.pdf
[57] Data provided by the Food Bank of Central New York
[58] http://map.feedingamerica.org/county/2016/child/new-york/county/chenango
[59] Kids' Well-being Indicators Clearinghouse, Council on Children and Families
[60] New York State School Report Card Data, 2016-2017
[61] Number of seniors with incomes below 200% of poverty

insecure seniors also have access to two soup kitchens and seven congregate meal sites. During 2016, congregate meal sites in the county served a total of 10,293 meals.[62] The sites offer approximately 756 meal times per year which averages to only 14 seniors participating at each meal opportunity.[63]

Home delivered meals are also available for seniors and people with disabilities under age 60. This service is restricted to people who are physically or cognitively unable to prepare their own food. In 2016, the home delivered meals program provided 68,781 meals to Chenango County residents.

Opportunity

Increase Participation in Congregate Meals: A focus on increasing participation in congregate meals can have the positive effective of improving food security while also freeing up income for other needs such as prescription medications and utilities. Participation also offers an opportunity to reduce social isolation and improve mental health.

Physical Activity

Several focus group participants noted that a lack of access to exercise opportunities was a significant barrier to having a healthy community. Participants said there should be more options, including less intimidating options, lower cost programs, and more accessible transportation. One participant shared, *"Going into a program like the YMCA or a gym is a worst fear. It's one of the highest anxiety producing [activities]. You need something that's their own and has that regular community in and out. Need something a little less energetic."* Another participant said, *"I think the YMCA is too expensive. I struggle in the wintertime. I don't want to walk outside, but the Y and other gyms are pretty expensive. I don't think I can afford a family plan even with both of us working. There are not many places to walk without charging you a lot of money."* Participants noted that they had challenges with transportation to gyms as well as to outside exercise options. One participant suggested, *"If they had a van to bring you. It's hilly where I live and it's hard to go for walks. If they had a van to take you down to the park to walk around the block. That would help."*

The County Health Rankings and Roadmaps data site indicates that 76% of county residents have adequate access to locations where they can engage in physical activity compared to 93% for New York State residents overall. Community members noted that while there were multiple parks and places to walk in nature in the county, many also suggested that they were limited by both transportation and winter weather conditions to engage in activity year-round.

Nearly 75% of Chenango County residents reported that they had participated in leisure-time physical activity in the past 30 days. This was slightly up from 72.2% in 2014 and higher than the NYS rate of 73.7%. There is opportunity for improvement to meet the 2024 Prevention Agenda goal of 77.4%.

In addition to outdoor physical activity opportunities, Chenango County is home to a YMCA with robust programming as well as several other fitness centers, yoga studios, and martial arts schools. Community members noted challenges in getting to and from these locations, as well as the prohibitive cost of some of the programs for some residents.

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[62] Congregate Meals Served, by County, by the Office for the Aging. https://data.ny.gov/Human-Services/Congregate-Meals-Served-by-County-by-the-Office-fo/ytzm-8tkg

[63] https://www.co.chenango.ny.us/aaoa/nutrition.php#nav-senior-centers 63 meals per month * 12 months = 750

School districts are required by law to have a wellness policy which "sets goals for nutrition education, physical activity, and other school-based activities that promote student wellness, as well as nutrition guidelines to promote student health and reduce childhood obesity for all foods available on each school campus."[64] While wellness policies are required, school districts vary in how much focus and effort they put toward creating robust practices to see that those policies are carried out. A review of Chenango County school district's policies found that several districts have policies which provide a clear vision for their goals toward student wellness.

Opportunity

Integrate CATCH: While several school districts have developed detailed wellness policies, others have not. All districts could use additional support to incorporate more promotion of healthier foods and encourage greater participation in physical activities. SNAP-Ed has been working with Chenango County schools to integrate the Coordinated Approach to Child Health (CATCH) model into activities and lessons. The CATCH program educates children about nutrition and physical activity through a variety of interactive lessons.

Tobacco Use

Chenango County has a higher than average percentage of smokers and a higher mortality and hospitalization rate for chronic lower respiratory disease. However, very few stakeholders suggested that tobacco use was an important health issue facing the county. A handful of focus group participants noted smoking as a pressing problem in conjunction with obesity. One focus group participant said, *"I think there's an awful lot of obesity that leads to heart disease and smoking is causing a lot of issues."*

The instance of self-reported smoking has increased in Chenango County, 20.1%, and continues to substantially exceed both the NYS rate of 14.2%, as well as the Prevention Agenda goal of 11.0%. The 2016 data for tobacco use is not currently available for low-income individuals and those reporting poor mental health, but the 2014 data indicate that Chenango County faces significant challenges in meeting the Prevention Agenda goals of 15.3% for low-income individuals and 20.1% for those reporting poor mental health.

Table 36. Tobacco Related Cancer and Respiratory Disease Indicators[65]

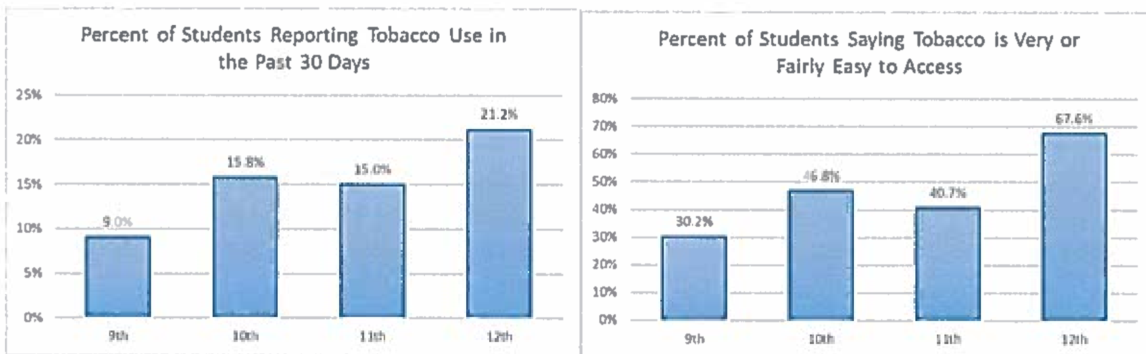
Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
Lip, Oral Cavity, and Pharynx Cancer				
Age adjusted incidence rate per 100,000	8.9	11.3	No	1st
Lung and Bronchus Cancer				
Age adjusted incidence rate per 100,000	67.4	66.3	No	2nd
Age adjusted mortality rate per 100,000	49.0	43.4	No	4th
Chronic Lower Respiratory Disease				
Adjust adjusted mortality rate per 100,000	56.4	35.0	Yes	4th
Age adjusted hospitalization rate per 100,000	29.8	26.9	Yes	3rd
Asthma hospitalization rate per 10,000				
Age adjusted	6.8	10.5	Yes	2nd

[6464] http://www.cn.nysed.gov/common/cn/files/Child%20Nutrition%20Reauthorization%202010-%20Local%20School%20Wellness.pdf retrieved 10/31/18

[65] County Health Assessment Indicators, NYSDOH, 2013-2015

Youth Tobacco Use
According to the 2015 PRIDE survey, 10% of Chenango County students in grades 6-12 reported using cigarettes monthly and 9.2% reported using e-cigarettes monthly. Over 20% of 12th graders reported tobacco use in the past 30 days. These rates are lower than the NYS rate of 25.4%, but above the Prevention Agenda goal of 19.7%. None of the key stakeholders or focus group participants noted that tobacco use by youth was a problem in Chenango County.

The 2015 PRIDE survey showed that tobacco use among Chenango County youth increases with age. The percent of students reporting tobacco use more than doubles between 9th and 12th grade respondents. Students report using tobacco most frequently in their own homes, friends' homes, and in cars, and that they also smoke most frequently on the weekends and after school. Generally, students also report that tobacco is easily obtainable. Over two-thirds of 12th graders said that tobacco was very easy or fairly easy to obtain. There are currently 59 retailers in Chenango County that sell tobacco products, the majority of which are convenience stores/gas stations. Between 2012 and 2016, twelve Retail Tobacco Enforcement Compliance visits indicated sales to minors.



Tobacco Use – High Risk Populations
In 2014, smoking rates among low-income populations and those with poor mental health were much higher than the rates among the general population. Qualitative information from service providers working with Chenango County residents with mental health disabilities suggest that eliminating tobacco use while trying to manage mental health issues and financial challenges is difficult. One provider said, *"A lot of our clientele, most of them smoke. You see some trying to make changes, but ...they're preoccupied with managing their mental health [and] eating right, quitting smoking [is not a priority]. They're just trying to stay off drugs and pay the rent."*

Table 37. Smoking Indicators by Year and Region[66]

	2014		*2016*	
	Chenango County	*New York State*	*Chenango County*	*New York State*
Current Smoking	18.9%	15.6%	20.1%	14.2%
Current Smoking (low-income)	34.1%	24.2%	NA	NA
Current Smoking (poor mental health)	31.4%	29.9%	NA	NA
e-Cigarettes	NA	NA	5.3%	4.3%

[66] eBRFSS

The only cessation service available in Chenango County is the Baby & Me Tobacco Free program provided by the Chenango County Department of Health. In 2016, 5% of children under age 5 (N=1,264) lived in a household where there was smoking present.[67] As of October 2018, 84 mothers were referred to the Baby & Me Tobacco Free program in 2018 and of those, 23 enrolled. Between January and October of 2018, the program served 159 cases. During this time frame, 24 mothers dropped out of the program.[68]

County level data is not currently available to assess the level of exposure to secondhand smoke and secondhand emissions from electronic vapor products.

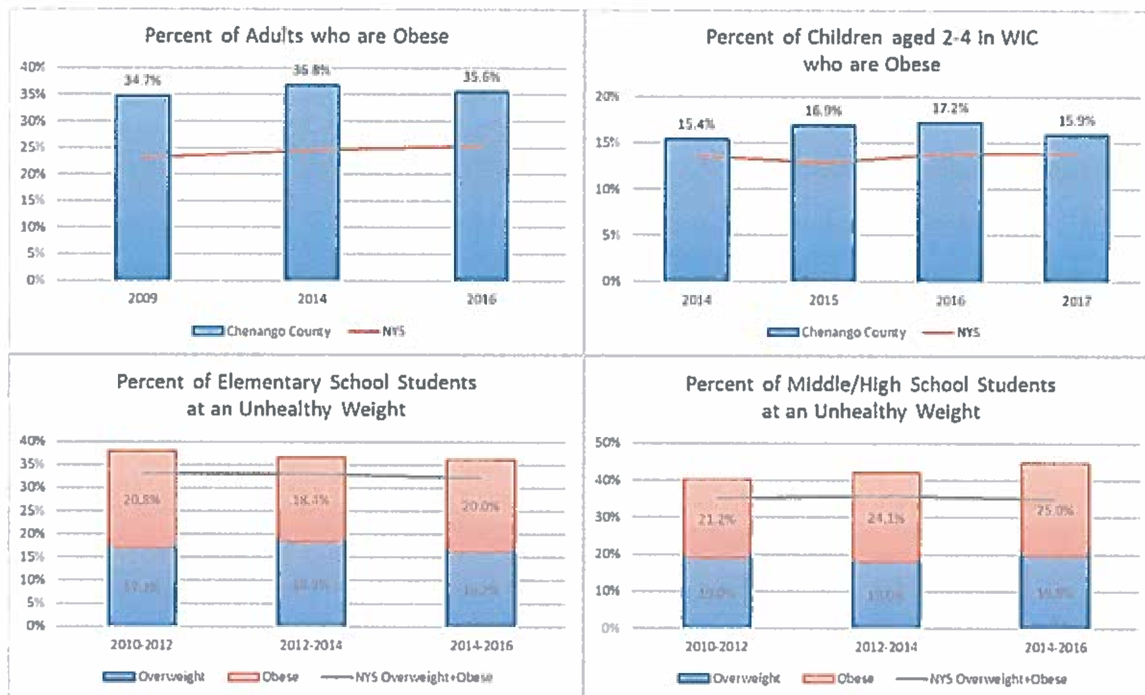
Opportunity
Expand Tobacco Cessation Programming and Policies: Create additional means to encourage tobacco cessation through outreach and health communications, and via health providers alerting their patients to available cessation benefits offered by Medicaid, including counseling and medication. Increase the number of smoke-free public spaces and housing units.

Adult and Childhood Obesity

Obesity and weight problems were identified by both key stakeholders and focus group participants as a pressing health issue facing the county. One focus group participant said, *"I think obesity is a huge problem in the county. I would say that is what I notice the most. I'm sure [it] is a problem of income and healthier foods are expensive. I'm sure that makes a big difference. It's easier to buy a bag of donuts for a dollar than it is to buy a bag of apples for five dollars."* Some stakeholders linked nutrition related conditions such as obesity to high chronic disease rates in the county. One stakeholder said, *"We have some of the worst statistics in the state for chronic disease. At some point, we might have a wave where this stuff is no longer manageable and these people become very sick and swamp the system, and their families. Somebody dying slowly from COPD or chronic heart disease or diabetes results in end stage renal failure and needing dialysis three times a week."*

Despite a small decrease in obesity between 2014 and 2016,[69] Chenango County's adult obesity rate remains very high. Over a third, 35.6%, of county residents are considered obese, higher than the NYS rate of 25.5%. The county's rate is well above the 2024 Prevention Agenda goal of 24.2%. The percentage of children in WIC aged 2-4 who are obese declined somewhat in 2017 to 15.9%, however, this exceeds the NYS rate of 13.9% and the Prevention Agenda goal of 13.0%. The percentage of students in Chenango County, who are obese, 21.2%, also exceeds the 17.3% rate for NYS (exclusive of NYC) and the Prevention Agenda goal of 16.4%.

[67] NYS PEDNSS
[68] Data from Chenango County Department of Health
[69] NYS eBRFSS



Preventive Care and Management

A handful of key stakeholders mentioned that a lack of preventive care is a pressing issue facing Chenango County. One stakeholder said that a central issue in the county is *"poverty-induced health issues such as infected teeth that didn't get dealt with and chronic health care issues that are under cared for because of lack resources to do prophylactic health care."* The stakeholder added, *"They're not going to get an annual check-up and they're not doing their tests for mammograms, pap smears, and preventative health. If we look at what are poverty-induced health issues, everything falls into a pretty clear focus. You're going to have nutrition-related issues, obesity included – sugary drink consumption, diabetes, heart disease, and you're going to have higher rates of preventative diseases such as colon cancer, breast cancer, prostate cancer – all of which can be identified by early screening."* Another stakeholder noted, *"I think also the other thing that we have is a large Medicaid population. I think that in itself is challenging because with that comes a lot of socioeconomic factors that make it difficult to get people involved in health care."*

<u>Cancer Screening</u>

Chenango County's incidence and mortality rates for breast cancer and cervical cancer are not significantly different than NYS rates. The incidence of colorectal cancer is higher in Chenango County than in NYS, but mortality rates are the same. Of particular note, but not addressed in the Prevention Agenda objectives, are prostate cancer rates. In Chenango County, the prostate cancer incidence rate is significantly lower than in New York State, but mortality rates are significantly higher. In addition, late stage prostate cancer rates are higher in Chenango County than in the state as a whole.[70]

The incidence of breast-cancer screening overall has gone down in Chenango County from 83.7% in 2014 to 76.9% in 2016.[71] Data from 2014 show that a similar percentage of women aged 40 and over in

[70] County Health Assessment Indicators, NYS Department of Health
[71] eBRFSS

Chenango County (79.7%) had a mammography screening as in NYS overall (77.8%). However, during the same time frame, a lower percentage of Chenango County women aged 50-74 (59.5%) were screened within a two-year period than in NYS as a whole (71.4%).[72] The new Prevention Agenda goals are focused on increasing breast cancer screening for low-income women, but county-level data by income is currently not available.

Over 77.3% of women in Chenango County aged 18 and older have had a Pap smear sometime in the previous three years. This rate is higher than the NYS rate of 74.2%.[73] In addition, 2016 data show that 79% of Chenango County women received cervical cancer screening compared to 82.2% for NYS overall.[74] Income-based cervical screening data is not currently available on a county level.

Colorectal screening has increased somewhat from 64.7% to 68.7% in 2016 and is comparable to the NYS rate of 68.5%. It is, however, substantially lower than the 2024 Prevention Agenda goal of 80%.[75]

Table 38. Cancer Indicators[76]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
All cancers				
Age adjusted incidence rate per 100,000	522.3	504.8	No	4th
Age adjusted mortality rate per 100,000	178.7	159.6	Yes	4th
Colon and Rectum Cancer				
Age adjusted incidence rate per 100,000	50.5	38.9	Yes	4th
Age adjusted mortality rate per 100,000	13.5	13.1	No	2nd
Female Breast Cancer				
Age adjusted incidence rate per 100,000	125.1	137.0	No	2nd
Age adjusted mortality rate per 100,000	22.2	19.3	No	4th
Age adjusted late stage incidence rate per 100,000	46.5	42.5	No	4th
Cervix uteri cancer				
Age adjusted incidence rate per 100,000	12.3	6.8	No	4th
Ovarian Cancer				
Age adjusted incidence rate per 100,000	13.5	12.5	No	3rd
Prostate Cancer				
Age adjusted incidence rate per 100,000	97.6	123.0	Yes	2nd
Age adjusted mortality rate per 100,000	28.5	17.0	Yes	4th
Age adjusted late stage incidence rate per 100,000	33.0	20.4	Yes	4th

Opportunity

Expand Community-Based Screening Options: A handful of focus group participants noted that having screening opportunities, like the mobile mammography van, available at community events was a positive health-related option. These types of services create additional screening options for residents while also offering opportunities for education about the importance and value of early identification through screening.

[72] County Health Assessment Indicators, NYSDOH, 2012-2014
[73] County Health Assessment Indicators, NYSDOH, 2012-2014
[74] eBRFSS
[75] eBRFSS
[76] County Health Assessment Indicators, DOH, 2012-2014

Diabetes Screening
The rate for premature death from cardiovascular disease is significantly higher in Chenango County (148 per 100,000) than for NYS (100.7 per 100,000).[77] The percentage of Chenango County adults that have been diagnosed by a physician with diabetes has stayed essentially stable between 2014 (12.4%) and 2016 (12.3%). However, it remains higher than the NYS rate of 10.5% (2016).[78] The percentage of Chenango County adults with a diagnosis of pre-diabetes has increased from 6.1% in 2014 to 8.7% in 2016.[79]

In 2014, 61.4% of Chenango County adults (age-adjusted rate) were screened for diabetes/pre-diabetes. This declined to 55.0% in 2016 which is lower than the NYS rate of 58.3% and less than the 2024 Prevention Agenda goal of 61.2%.[80] County-level diabetes screening data by income-level is not currently available.

Data on diabetes control at the county level is limited. In 2010, 85% of diabetic Medicare enrollees aged 65 to 75 received HbA1c monitoring, equal to the NYS rate overall.[81] However, people in Chenango County with diabetes are more likely to be hospitalized suggesting that there may be opportunities for better self-management.

In 2014, fewer adults in the county (64.7%) reported a recent checkup than in NYS as a whole (70.9%). In 2016, similar rates of Chenango County residents (84.2%) and New York State residents (84.9%) said they had a health care provider.[82]

County-level data detailing the percentage of children who received an assessment for weight status is not available. However, the percentage of children in Chenango County enrolled in government sponsored insurance programs who had received the recommended number of well visits (55.4%) was significantly lower than children in NYS (excluding NYC) overall (62.2%). Chenango County ranks in the 4th quartile for number of well child visits for all age groups.

Table 39. Diabetes[83]

Indicator	*County Rate*	*NYS excl NYC*	*Sig. Dif.*	*County Ranking Group*
Diabetes (per 10,000 population)				
Age-adjusted mortality rate (2013-2015)	11.9	15.3	Yes	1st
Age-adjusted hospitalization rate (primary diagnosis) (2013-2015)	16.0	13.8	Yes	4th
Age-adjusted hospitalization rate (any diagnosis) (2013-2015)	194.6	182.4	Yes	3rd
Diabetes short-term complication rate (18 and older) (2013-2015)	9.6	6.1	Yes	4th

[77] County Health Assessment Indicators, NYSDOH, 2013-2015
[78] eBRFSS
[79] eBRFSS
[80] eBRFSS
[81] University of Wisconsin Population Health Institute, County Health Rankings
[82] eBRFSS
[83] County Health Assessment Indicators, NYSDOH, 2013-2015

Table 40. Child and Adolescent Health Indicators[84]

Indicator	*County Rate*	*NYS excl NYC*	*Sig. Dif.*	*County Ranking Group*
% of children with recommended number of well child visits in government sponsored insurance programs (2015)	54.2%	70.0%	Yes	4th
children aged 0-15 months	80.0%	82.7%	No	4th
children aged 3-6 years	69.4%	81.6%	Yes	4th
children aged 12-21 years	44.0%	62.2%	Yes	4th

Hypertension

The rate of adults reporting hypertension diagnoses has remained steady in Chenango County at 38% in 2016 and is higher than the NYS rate of 31.7%. In 2014, 70.1% of Chenango County adults reported they were taking blood pressure medication, slightly lower than the 75.2% in NYS overall for the same time frame.[85]

Asthma

Adult asthma rates (8.5%) for Chenango County are comparable to NYS rates (10.1%). Asthma hospitalizations and emergency department visits in Chenango County are well below both NYS and the Prevention Agenda goals for the target age groups.

Table 41. Respiratory Disease Indicators[86]

Indicator	*County Rate*	*NYS excl NYC*	*Sig. Dif.*	*County Ranking Group*
Hypertension (per 10,000 population)				
Hospitalization rate 18 and older	3.5	4.7	No	2nd
Hospitalization rate (any diagnosis) 18 and older	598.7	546.4	Yes	4th
Emergency department visit rate 18 and older	27.8	25.7	No	3rd
Emergency department visit rate (any diagnosis) 18 and older	1,377.5	960.8	No	3rd
Asthma (per 10,000 population)				
Age-adjusted hospitalization rate (2013-2015)	6.8	10.5	Yes	2nd
Age 0-4 hospitalization rate (2013-2015)	12.6	29.4	Yes	1st
Age 0-17 hospitalization rate (2013-2015)	6.2	14.3	Yes	1st
Age-adjusted emergency department rate (2016) (NYS)	52.0	77.1		
Age 0-4 emergency department rate (2016) (NYS)	103.1	186.4		
Age 0-17 emergency department rate (2016) (NYS)	59.9	137.1		

More people in Chenango County with a chronic disease reported participating in a course or class to learn how to manage their disease in 2016 (9.5%) than in 2013-2014 (7.2%). The Chenango County 2016 rate is slightly below the NYS rate of 10.1% and the 2024 Prevention Agenda rate of 10.6%.

[84] County Health Assessment Indicators, NYSDOH, 2013-2015
[85] eBRFSS
[86] County Health Assessment Indicators, NYSDOH, 2013-2015

Injuries, Violence and Occupational Health

Key informants and focus group participants did not remark on injuries as a particular area of concern in Chenango County. However, the mortality rates for unintentional injuries in Chenango County were much higher than in the state overall (excluding NYC). In addition, non-motor vehicle mortality rates in Chenango County are higher than NYS (excluding NYC) rates. The 2024 Prevention Agenda does not articulate goals related to any of these indicators, but they may be an area where other entities can focus efforts.

Table 42. Injury Indicators[87]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig.Dif.*	*County Ranking Group*
Age-adjusted unintentional injury mortality rate	41.8	33.4	Yes	4th
Age-adjusted non-motor vehicle mortality rate	30.1	26.3	Yes	3rd

Falls

Overall, the rate of falls hospitalizations among Chenango County residents is better than that of NYS as a whole. The rate of falls among residents aged 65 and over is considerably lower than the NYS rate and well below the Prevention Agenda goal of 170.1. The number of deaths due to falls for Chenango County residents aged 65 and over in 2012-2014, 2.97, is also below the Prevention Agenda goal of 4.1 per 10,000 residents.

Table 43. Injury Indicators (cont.)

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
Falls hospitalization rate per 10,000				
Age-adjusted (2012-2014)	27.9	33.9	Yes	1st
Aged less than 10 years (2012-2014)	3.7*	7.0	No	1st
Aged 10-14 years (2012-2014)	s	4.6	N/A	N/A
Aged 15-24 years (2012-2014)	6.0	5.0	No	3rd
Aged 25-64 years (2012-2014)	19.4	18.2	No	3rd
Aged 65-74 years (2012-2014)	60.4	73.5	No	1st
Aged 75-84 years (2012-2014)	171.2	223.1	Yes	1st
Aged 85 years and older (2012-2014)	434.7	572.1	Yes	1st
Aged 65 and over (2014)	136.2	188.7		

Violence

The age-adjusted homicide mortality rate in Chenango County is higher than the NYS rate and higher than the Prevention Agenda goal of 3.2 per 100,000, but due to the small numerator in Chenango County, these rates cannot be considered stable. The Chenango County assault hospitalization rate is lower than that of both NYS and the Prevention Agenda. Race and ethnicity data for victims of violence in Chenango County is unstable due to small numbers and is therefore not meaningful for analysis.

[87] County Health Assessment Indicators, 2013-2015

Table 44. Injury Indicators (cont.)

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
Homicide mortality rate per 100,000				
Age-adjusted	4.6*	2.8	Yes	4th
Assault hospitalization rate per 10,000				
Age-adjusted (2012-2014)	1.2	2.5	Yes	1st

Stakeholders noted that the elimination of the domestic violence shelter in Chenango County has put county women and children at risk for violence. One focus group participant stated, *"There's no place for people to go so they stay in [a] toxic situation. That's a huge, major problem."* Another stakeholder said, *"We have no safe houses here and domestic violence has increased pretty rapidly. We have a provider for domestic violence, but it's not as involved as it used to be. We used to have domestic violence advocates come in the middle of night to the emergency room, but we don't have that service any more. The safe houses are out-of-county. People are reluctant to go anyway and if they have to get to the border of another county, it's even harder. In addition, the safe house cannot cross county lines to pick them up which is a whole other transportation issue. I've seen a huge increase in that. I think that's an important service and I wish we would see it where it was before."*

Occupational Injuries

Chenango County's rate for work-related injuries is significantly higher than the NYS rate but has been gradually declining over time. The Chenango County rate is higher for all types of work-related injuries with the exception of machine injuries. Since 2000, 91 workers in Chenango County aged 15-19 received some form of workers' compensation benefits due to a workplace injury. This represents only 1.5% of all workers' compensation claims in the county.[88] Rates of occupational injuries by race and ethnicity are unavailable on a county level.

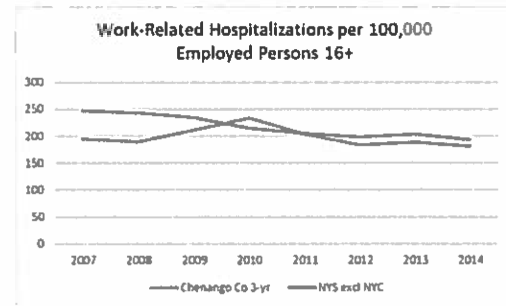


Table 45. Work Related Injuries Treated at Hospital by Type per 100,000 Employed Persons Aged 15+ (2012-2014)

	Chenango County	*NYS (all)*
Assaults	85.7	58.4
Cuts/pierces	276.9	185.6
Falls	295.3	232.9
Machine injuries	22.9	26.7
Struck by/Against	371.7	192.4

Traffic Accidents

Between 2014 and 2016, only 1.2% of traffic related accidents in Chenango County involved pedestrians and bicyclists. While pedestrian and bicyclist injuries are the focus of the Prevention Agenda goals, Chenango County's mortality and injury rate related to motor vehicles is of more concern locally. The motor vehicle mortality rate in the county (11.7 per 100,000) is significantly higher than the NYS

[88] Assembled Workers' Compensation Claims: Beginning 2000, Open NY

(excluding NYC) rate (7.1 per 100,000).[89] Traffic injuries also accounted for 316 emergency department visits and 44 hospitalizations in the county.

Table 46. Motor Vehicle Crashes by Crash Type, 2014-2016

	Number	*Percent*
Fatal accident	14	0.4%
Injury accident	156	5.0%
Property damage and injury accident	514	16.4%
Property damage accident	2,442	78.1%
Total	3,126	

Table 47. Medical Intervention Due to Motor Vehicle Traffic Injuries in Chenango County, 2014-2016[90]

	Number
Hospitalizations	44
Emergency Department Visits	316
Occupants	225
Motorcyclists	18
Pedestrians	10
Bicyclists	2

Outdoor Air Quality

County level information on outdoor air pollutants is not available for Chenango County. However, the rural nature of the county limits the types of pollutants that would normally impair air quality. None of the public input indicated that outdoor air pollutants are of concern in Chenango County.

Built and Indoor Environments

Over three quarters (76.9%) of Chenango County workers travel to work alone in a motor vehicle as compared to about half of workers in NYS as a whole (53.0%). Only 23.1% of Chenango County workers use alternative forms of transportation or work from home, a rate well below the NYS rate of 45.5% and the Prevention Agenda rate of 47.8%. There is extremely limited access to public transportation in the county.

Table 48. Mode of Transportation to Work[91]

	Number	Percent
Car, truck or van alone	16,027	76.9%
Car, truck or van carpooled	2,496	12.0%
Public transportation	102	0.5%
Walked	1,019	4.9%
Taxi, motorcycle, or bicycle	216	1.0%
Worked at home	986	4.7%

None of the communities in Chenango County are currently designated as a "Climate Smart Community." However, since 2000, 114 new solar electric applications were received by NYSERDA for either residential or commercial properties in Chenango County.[92] To date, 101 of those applications have been completed with 13 still in the pipeline. The bulk of these projects, 94%, were for residential properties. The number of applications hit a high in 2015 but has declined in recent years.

[89] County Health Assessment Indicators, NYSDOH, 2013-2015
[90] https://www.health.ny.gov/statistics/prevention/injury_prevention/traffic/county/chenango/2014/chenango_co_leading_causes.pdf
[91] Table B01824, Means of Transportation to Work by Occupation, American Community Survey 5-Year Estimates, 2012-2016
[92] Solar Electric Programs Reported by NYSERDA Beginning 2000, NY Open Data

A handful of focus group participants noted that Chenango County has some options with respect to outdoor recreational opportunities to stay healthy. Participants remarked on the two-mile walking loop in Greene as a positive option for exercise. Other participants said they used their local school's track for the same benefits. However, several focus group participants suggested that a lack of transportation to and from these options was a barrier. The geography and economy in Chenango County has presented challenges for improving the built environment with respect to transportation.

Opportunity

Develop More Outdoor Recreational Spaces: Focus group participants frequently noted that their preferred method of exercise was walking and that staying engaged socially was a key to being healthy. Having access to more walking paths and developing "walking groups" could enhance and encourage healthy behaviors among all age groups. Ensuring that the paths are safe from motor vehicle traffic will safeguard against pedestrian-motor vehicle injuries and accidents.

Home and School Environments

As noted in the Social Determinants of Health section, some stakeholders and focus group participants mentioned housing as an important health issue facing the county. A couple of stakeholders indicated that some housing in the area was substandard. One stakeholder said, *"The housing that we do have is overpriced for the amount of housing they're getting. A lot of the times the properties are not well-maintained."* In the *2017 OFC Needs Assessment*, the most commonly cited repair needs of Head Start Families included windows and doors (20%), roof (17%), floor (14%), plumbing/water (13%), electrical services (11%), and heat/furnace (10%). None of the participants indicated that the school environment was of concern.

Indicator data show a potential area of concern with Chenango County's low rate of lead screening. Only two-thirds of children born in 2012 and aged 9-17 months were screened for lead and only 57.7% of children aged 18-35 months had been screened.[93] These rates are well below the 2024 Prevention Agenda target of 95% of children screened at ages one and two. The lack of lead screening in the county may be of considerable concern because over a third (35.6%) of occupied housing units in Chenango County were built before 1940,[94] and over two thirds (68.9%) of homes were built before 1980. Lead paint was not banned from residential paint until 1978 suggesting that Chenango County might have a higher number of homes containing lead paint than is represented by number of children being screened. Of particular note is that renters in Chenango County are more likely to reside in older homes since over half (53.1%) of rental units in the county were built before 1960. Children living in low-income homes are more likely to live in rental properties and thus may be at higher risk for high blood lead levels. Chenango County currently ranks in the 2nd quartile for confirmed high blood level, but because a relatively low percentage of children are being tested for lead, it is unclear whether this ranking might change with increased testing. The Chenango County Department of Health has successfully been working with providers to encourage on-site testing. One pediatric practice is now providing on-site venipuncture testing since the last quarter of 2018 and many of the other practices are offering finger stick screens. The county Lead Coordinator reported an increase in testing.

[93] County Health Assessment Indicators, 2013-2015
[94] Table S2504, Physical Housing Characteristics for Occupied Housing Units, American Community Survey 5-Year Estimates, 2012-2016

Table 49. Child and Adolescent Health Indicators

Indicator	County Rate	NYS Rate (exc NYC)	Sig. Dif.	County Ranking Group
% of children born in 2012 with a lead screening (2012-2015)				
aged 0-8 months	0.2*	0.8	No	4th
aged 9-17 months	67.5	63.4	No	2nd
aged 18-35 months	57.7	70.3	Yes	4th
% of children born in 2012 with at least two lead screenings by 36 months (2012-2015)	45.8	49.0	No	3rd
Incidence of confirmed high blood lead level (10 micrograms or higher per deciliter) - rate per 1,000 tested children aged <72 months	12.1	10.2	No	2nd

According to the NYS Department of Health Radon Program, 1,140 homes have been tested for radon out of 19,837 occupied housing units. Data from the NYSDOH Wadsworth Center estimates that 52% of basements in homes in Chenango County have radon levels higher than 4 pCi/L and that 23% of the living areas of homes have radon levels higher than 4 pCi/L.[95] This data indicate that there is an opportunity to increase radon testing and radon mitigation in the county.

Opportunity

Lead Screenings: Continued efforts to encourage providers to make follow-up calls to parents of children who have not been screened and continued delivery of education on the importance of lead testing.

Radon Testing: Outreach to health providers and to residents to encourage radon testing is needed. Chenango County has both a high rate of smoking as well as pockets of high rates of radon, the combination of which increases the risk of lung cancer dramatically. Outreach and education on the risks of radon and the availability of low-cost radon testing kits from the NYS Department of Health would help mitigate these risks.

Water Quality

Stakeholders did not indicate any particular concern with respect to drinking water in the county. The 2016 Chenango County Comprehensive Plan explains that public and private water sources in Chenango County are reliant on adjacent primary aquifers. The majority of municipalities are supplied by wells with a municipally owned/operated public water system. The aquifers in Chenango County provide abundant ground water for these public systems. However, the Comprehensive Plan also noted that "Rural residential water systems are typically supplied by natural springs and drilled/dug water wells. Too often residential properties, especially in small hamlets, have small lots, poor soil and improperly developed water wells easily contaminated by private waste water systems and/or inadequate drainage."[96]

Stakeholders also did not suggest that there are any current or potential public health risks with recreational water in the county. According to the Toxic Release Inventory (TRI) from the Environmental Protection Agency (EPA), Chenango County is home to four facilities that must report what chemicals they release into the environment. The bulk of the releases (77%) are discharged into the Chenango

[95] https://www.wadsworth.org/programs/ehs/nuclear-chem/radon Retrieved 12/5/18
[96] 2016 Chenango County Comprehensive Plan, p. 103

River and released by one company (99.5%). The primary chemicals released into the water are nitrate compounds.

Table 50. Toxic Release Indicators

	Chenango County
Number of TRI Facilities:	4
Total Production-Related Waste Managed:	290.6 thousand lbs.
Total On-site and Off-site Disposal or Other Releases:	160.6 thousand lbs.
Total On-site:	159.7 thousand lbs.
• Air:	36.0 thousand lbs.
• Water:	123.6 thousand lbs.
• Land:	5 lbs.
Total Off-Site:	937 lbs.

Food and Consumer Products

The Chenango River has been found to be polluted with mercury and fish taken from the river are under an advisory for limited consumption. Women under 50 and children under 15 are cautioned not to eat any fish taken from the Chenango River, while men over 15 and women over 50 are restricted to 4 meals per month due to mercury concerns. County-specific data on the number of people who have high mercury levels is not available, but there is not any particular concern with respect to the number of residents eating excessive amounts of fish from the river.

Chenango County has not experienced any significant foodborne illness outbreaks and while all county staff have been trained on how to manage outbreaks, additional training could offer more comprehensive response options.

Women, Children and Infants

Maternal and Women's Health

Key stakeholders and focus group participants did not specifically mention a need for more preventive care for women as a pressing issue in the county. In addition, women's health indicators do not show any area of particular concern. In 2016, 77.5% of women aged 18-64 in Chenango County had a recent check-up. This is an increase from 2014's rate of 70.3% and above the 2016 NYS rate of 73.1%. The Prevention Agenda 2024 goal of 80.6% is targeted to women aged 18-44, however this data is not currently available on the county level. In 2014, 61% of Chenango County women discussed having a healthy pregnancy with their provider, which is significantly higher than the NYS rate of 39.3% and the 2024 Prevention Agenda goal of 38.1%.

Of potential concern is Chenango County's higher-than-state average for unintended pregnancies and birth rates for teens aged 15-19 (2013-2015).

Table 51. Pregnancy and Birth Indicators

Indicator	*County Rate*	*NYS*	*Sig. Dif.*	*County Ranking Group*
Unintended pregnancy[97] (2015)	37.5%	23.7%		
Percentage of births to teens aged 15-17[98]	1.8	1.1	Yes	3rd
Percentage of births to teens aged 15-19	7.8	4.2	Yes	4th

Opportunity

Family Planning and Access to Contraception: With over a third of pregnancies in 2015 being unintended, there is an opportunity to ensure that every baby born in Chenango County is planned for both financially and emotionally. This would potentially reduce adverse childhood experiences and offer more opportunity for young women to pursue higher education and employment.

Maternal mortality and morbidity was not mentioned by any stakeholder or focus group participant as an issue facing Chenango County. The rates for maternal mortality in Chenango County are too small for meaningful analysis. Between 2014 and 2016, only one maternal death was reported in Chenango County. SPARCS data from 2016 indicate very little evidence of severe maternal morbidity issues in Chenango County. Of the 269 hospital discharges related to pregnancy and childbirth, all had a minor risk of mortality. There was only one childbirth that required the mother to receive a blood transfusion, which is a key indicator of severe maternal morbidity.[99]

Perinatal and Infant Health

Information from stakeholders and focus group participants did not touch on infant mortality or morbidity as a critical issue facing the county. While the Chenango County rate of infant mortality is higher than the 2024 Prevention Agenda rate at 4.0 per 1,000 births, Chenango County's numerator is too low to be stable and meaningful. However, the rates for post-neonatal death and fetal death are higher in Chenango County and this could be an important indicator to watch in the future. Chenango County's rate (per 1,000 live births) for pre-term births was 10.9 in 2016, which is higher than the Prevention Agenda Goal of 8.3, but the percentage of babies born with low birthweight and very low birthweight are comparable to NYS as a whole.[100]

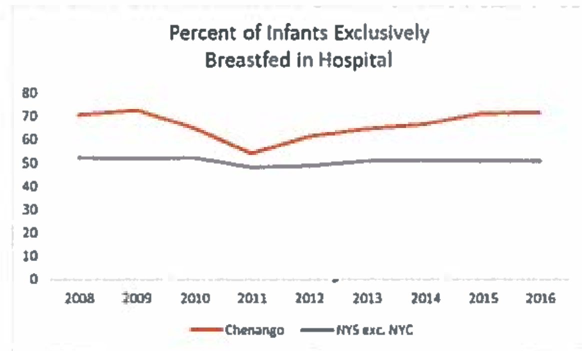
Other concerns not specifically related to Prevention Agenda goals, but that could have a significant impact on infant mortality and morbidity, include Chenango County's higher-than-region incidence of drug use during pregnancy (8.6%)[101] and extremely high rate of tobacco use during pregnancy (29.3%).[102]

[97] Mothers and Babies Perinatal Network Maternal Child Health Statistics
[98] County Health Assessment Indicators, NYSDOH, 2013-2015
[99] CDC, Severe Maternal Morbidity Fact Sheet, https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html retrieved November 30, 2018
[100] 2017 Mothers & Babies Perinatal Network Maternal Child Health Statistics
[101] Southern Tier Region as defined by Mothers & Babies Perinatal Network
[102] 2017 Mothers & Babies Perinatal Network Maternal Child Health Statistics

Table 52. Infant Health Indicators[103]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
Mortality rate per 1,000 live births				
Infant (less than 1 year)	5.2*	5.2	No	3rd
Neonatal (less than 28 days)	2.6*	3.8	No	2nd
Post-neonatal (1 month to 1 year)	2.6%	1.4	No	4th
Fetal death (20 weeks gestation or more)	7.5	4.2	No	4th
Perinatal (20 weeks gestation to less than 28 days of life)	8.1	8.0	No	2nd
Perinatal (28 weeks gestation to less than 7 days of life)	4.4*	5.3	No	2nd

<u>*Breastfeeding*</u>
Chenango County selected "Promote exclusive breastfeeding" as a priority area in the 2016-2018 Community Health Assessment. The efforts focused on in this priority area were successful. The percentage of Chenango County infants exclusively breastfed in the hospital increased to 71.9% in 2016, far surpassing the 2024 Prevention Agenda goal of 49.3%.



Child and Adolescent Health
Statistics on the number of children struggling with mental and emotional challenges is not readily available on the county level with the exception of suicide and self-injury rates. The suicide mortality rate for children 15-19 years of age in Chenango County was 11.1 per 100,000 population which is more than double the NYS rate.[104] In addition, the self-inflicted injury rate for this same group was 20.2 per 10,000 persons which is more than double the NYS rate of 7.6.[105]

Stakeholders and focus group participants also noted a significant lack of providers for child mental health care. One focus group participant said, *"Mental health for children is minimal and I don't know that the people who are seen are qualified. Are they really qualified to be dealing with kids as much as adults? They definitely have different needs."* Another participant who is also a parent stated, *"There are very few mental health options that are out there."* Stakeholders also noted that Norwich Central School District intends to eliminate its mental health program which will in turn eliminate a critical resource for children who need support. One stakeholder said, *"Norwich CSD is going to remove the mental health program that has been based out of the school. How unfortunate. What cause is there for that? The superintendent says it comes down to money and that we can't afford it. I think this is where we have to say, we can't afford what happens if we extrapolate that out to adults when they're not mentally stable. I think addressing those mental issues when they're young is a vital part of the commitment."*

[103] County Health Assessment Indicators, NYS, 2013-2015
[104] County Health Assessment Indicators, NYS, 2014-2016
[105] County Health Assessment Indicators, NYSDOH, 2014-2016

According to the Southern Tier DSRIP Needs Assessment of 2016, an estimated 303 Chenango County children receive care from the local mental health clinic and 33 children receive services from community support programs. There is a much higher percentage of Chenango County youth receiving care through Medicaid (81.5%) than in the Southern Tier Region overall (68.7%) despite having a similar percentage of the child-age population eligible for Medicaid. This discrepancy may indicate either a higher incidence of mental health needs or a better utilization of services.

The rate per 100,000 children receiving care from the local mental health clinic is slightly lower in Chenango County than in the Southern Tier overall, but the rate per 100,000 children receiving services from community support agencies is more than double that of the Southern Tier. There are no emergency mental health support services available in Chenango County; the nearest services of that nature are in Broome and Tompkins Counties.

Table 53. Children Served by Mental Health Programs[106]

	Chenango	*Southern Tier Region*
Children receiving care from locally-operated mental health clinic: Medicaid	247	1,517
Children receiving care from locally-operated mental health clinic: non-Medicaid[107]	56	692
Local mental health clinic treatment rate per 100,000 children	2,383	2,411
Number of children receiving service from community support programs	33	156
Number of children receiving service from community support programs per 100,000 children	318	139

Stakeholders noted that early intervention with Chenango County children could potentially ameliorate problems faced in adulthood. One stakeholder said, *"I have often thought if we could get into the schools at a younger age it would be better. A lot of these kids have their behavioral issues already established in grade school. The kids that are unhappy in grade school are probably going to be addicts at 19 or 20. And I think a lot of behavioral things early on can be fixed also. I think it's got to stem with grade-school level kids and families."* Another stakeholder said, *"I know that intervention is necessary, but I'm a big supporter of prevention first. I think that teaching children good habits early is the way to prevent things from happening long term."*

A key protective factor in children's emotional and social well-being is engagement in activities and with the community. Information from the 2015 PRIDE survey indicates that a significant portion of students in Chenango County do not engage in activities that would support their emotional development and relationships.

Table 54. Protective Factors - Results from 2015 PRIDE Survey

Grade	*Never take part in community activities*	*Never take part in school activities*
6th	35.6%	22.8%
7th	49.9%	29.7%
8th	44.8%	30.1%
9th	47.4%	38.5%
10th	51.6%	36.4%
11th	45.1%	32.7%
12th	40.9%	37.2%

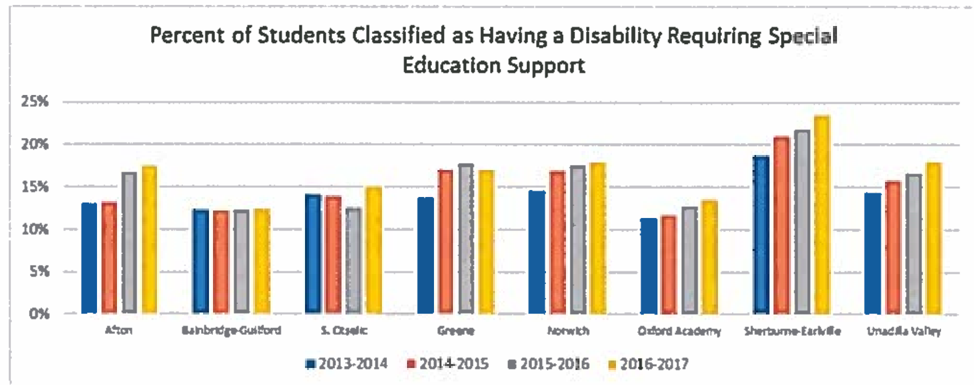
[106] Southern Tier DSRIP Needs Assessment – December 2016
[107] estimated

Opportunity

Increase after school programming: Chenango County has limited after school options for students, particularly for middle and high school students. Opportunities for students to engage in healthy activities and to receive emotional support could increase Chenango County's youth's resilience. Providing transportation to families would be an important component to ensure successful participation.

Children with Special Health Care Needs

Nearly 20% of all Chenango County students are part of their district's special education program. The percentage of children in the special education program has been increasing in most districts over the past few years.[108]



A handful of parents indicated a positive experience with the services their children receive in school. One parent said, *"My son receives occupational therapy through the school, but my daughter didn't qualify. I think they're doing the best they can. I think most parents are happy with what they're seeing and willing to do work at home. I think they're doing what they can with the money and time they have."*

According to the Early Intervention Performance Data, children in their program improved their social emotional skills, increased their acquisition skills and use of knowledge (including that which was related to language and literacy), and were engaging in appropriate behaviors, doing so at a much higher rate than in NYS as a whole. However, the data also show that a much lower percentage of families in Chenango County report that services have helped their families know their rights, effectively communicate their children's needs, and helped the family help their children develop and learn. A handful of focus group participants noted that challenges exist in obtaining services for children with disabilities. One participant shared, *"This county does terrible with support for kids with disabilities, and there's so much need. But the waiting list is immense to get in even."* Key stakeholders mentioned that the lack of respite care for parents caring for children with special care needs created a significant gap in services. One parent said, *"My son is bipolar and has developmental disabilities. We moved from Broome County to Greene. We used to have respite services, but none are available now."*

[108] NYSED

Table 55. Early Intervention Municipality Performance Data[109]

	Chenango County	*NYS*
Percent of children who entered or exited the program below age expectations in:		
positive social-emotional skills (including social relationships) who substantially increased their rate of growth by the time they exited the program	*	58.9%
positive social-emotional skills (including social relationships) who were functioning within age expectations by the time they exited the program	100.0%	40.9%
acquisition and use of knowledge and skills (including early language/communication and early literacy) who substantially increased their rate of growth by the time they exited the program	100.0%	71.8%
acquisition and use of knowledge and skills (including early language/communication and early literacy) who were functioning within age expectations by the time they exited the program	100.0%	41.8%
use of appropriate behaviors to meet their needs who substantially increased their rate of growth by the time they exited the program	100.0%	73.8%
use of appropriate behaviors to meet their needs who were functioning within age expectations by the time they exited the program	100.0%	36.2%
Percent of families participating in Part C who report that early intervention services have helped the family know their rights	40.0%	78.4%
Percent of families participating in Part C who report that early intervention services have helped the family effectively communicate their children's needs	40.0%	74.2%
Percent of families participating in Part C who report that early intervention services have helped the family help their children develop and learn	60.0%	86.3%

Dental Caries

Both stakeholders and focus group participants identified dental care as a concern in the county. Significantly more children from Chenango County experience dental caries than children in NYS overall. In addition, fewer Chenango County children had at least one dental visit in the last year. Over half of 3rd graders from 2009 to 2011 had caries experiences. In addition, only 39.2% of children aged 2-20 enrolled in Medicaid had a dental visit in the past year.[110] The rate for caries outpatient visits per 10,000 children in Chenango County, 161.4, is nearly double the New York State rate of 83.4.[111]

Information from stakeholders indicates that dental care for children in the county has continued to be challenging and is currently being made worse by the lack of dental care available for Medicaid patients specifically. The dental clinic provided through Chenango Memorial Hospital was recently closed. The closure is a result of inadequate Medicaid reimbursement, which made it difficult to sustain a practice that had a high Medicaid patient base. This The clinic was the primary source of dental care for Medicaid patients in the county and the closure has become a significant concern for both key stakeholders and focus group participants. The lack of dental providers will likely have a negative impact on the percentage of children afflicted with dental caries.

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[109] https://www.health.ny.gov/statistics/community/infants_children/early_intervention/local_program_performance/chenango.htm
[110] 2014-2016 NYS Medicaid Program Data
[111] 2012-2014 SPARCS data

Table 56. Oral Health Indicators[112]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
Percent of 3rd grade children with: (2009-2011)				
Caries experience	57.0%	45.4%	Yes	4th
Untreated caries	30.6%	24.0%	Yes	4th
Dental sealants	41.7%	41.9%	Yes	2nd
Dental insurance	80.8%	81.8%	Yes	2nd
With at least one dental visit in last year	76.5%	83.4%	No	1st
Taking fluoride tablets regularly	73.4%	41.9%	Yes	4th

One focus group participant with several foster children in her family said, *"For dental care, there is a huge lack of providers. We had one, but now have none that accept our insurance. There was a huge wait list, and when we finally got in, they could only clean teeth because they didn't have a dentist. We waited for months, now they're closing. Now we have to go to Binghamton for dentists. When you have seven people, that's really not good at all."* She noted that transportation issues have further complicated the lack of local dental care. She said, *"We normally have a car, so we are lucky. Many families don't, so that is a problem."* Many key informants agreed that the lack of dental care for Medicaid eligible residents was a pressing issue in Chenango County. One stakeholder said, *"Dental is probably the number one thing. The Medicaid population has basically nowhere to go locally because private practices accept very few of those kinds of patients. That's the number one day-to-day issue."* Another stakeholder said, *"Dental. That's the biggest issue. There's no Medicaid provider, so if parents don't have transportation to get them to Broome County, there's nothing for them. Dental is a huge need. I think it's a problem beyond the Medicaid population. With the ALICE population, a lot of parents don't qualify for services, but can't get insurance with their employer because they're part-time or they do have insurance but can't afford to pay up front to get to the dentist. They just can't afford to pay the $1,000 up front to get an extraction or root canal. And so, they don't go. I do feel like that's a barrier as a whole for everybody in the county. If they're not in network and won't bill, [the dentist] won't work with you."*

In addition to the lack of dental providers, a significant portion of county residents do not have fluoridated water. About half of Chenango County residents are on private water supplies and the City and Town of Norwich are the only municipalities in Chenango County with fluoridated water systems. These cover only 8,700 residents or approximately 41.4% of the population, which is significantly less than the 2024 Prevention Agenda goal of 77.5%.

Opportunity

Expansion of School Dental Project: The Chenango County Dental Task Force has been formed to provide every elementary student in the county with a toothbrush, toothpaste and floss. The goal is to continue this project and to pilot in-class tooth brushing. Bringing the tools and knowledge for appropriate dental care to children in schools could be enhanced by integrating dental services into schools, community-based organizations, the WIC program, or non-dental medical facilities.

[112] County Health Assessment Indicators, NYS, 2013-2015

Health Disparities

Economic class is the primary distinction by which to compare maternal and child health outcomes in Chenango County. For the most part, indicators suggest that there are not significant differences in health outcomes between women and children enrolled in Medicaid and those who are not. Low birth weight rates in Chenango County varied between 2012 and 2013 which is common among small populations. The rates are not significantly different from statewide rates. In addition, low birth weight rates in Chenango County are not significantly different between Medicaid births and non-Medicaid births.[113]

Table 57. Newborn Low Birth Weight Rates by County - Medicaid Only

	Chenango	*Statewide*
2012	9.1%	6.8%
2013	5.3%	6.9%

Table 58. Number and Percent of Newborn's Low Birth Weight in Chenango County, 2013 by Medicaid Status

	Number	*Percent*
All births	31	6.2%
Medicaid births	12	5.3%
Non-Medicaid births	19	7.0%

For the most part, Medicaid pediatric inpatient discharges indicate that fewer children in Chenango County are hospitalized for potentially preventable conditions than would be expected for nearly all indicators. The one exception being in 2014, when Chenango County's rate for diabetes short-term complications was higher than expected and higher than the NYS rate.

Table 59. Pediatric Discharges by Illness Observed and Expected Rates per 100,000 people[114]

	2011		*2012*		*2013*		*2014*	
	Obs.	*Exp.*	*Obs.*	*Exp.*	*Obs.*	*Exp.*	*Obs.*	*Exp.*
Asthma	79.3	119.7	127.3	121.2	25.2	112.6	0.0	136.9
Diabetes Short-term Complications	38.0	34.9	0.0	32.6	0.0	28.8	33.3	24.6
Gastroenteritis	91.1	83.7	0.0	67.7	22.0	77.3	0.0	58.7
Urinary Tract Infection	22.8	33.5	21.9	34.5	66.0	37.7	20.9	33.6
Pediatric Quality Acute Composite	0.0	53.3	0.0	51.8	34.7	60.9	0.0	53.6
Pediatric Quality Chronic Composite	76.0	111.9	142.1	116.9	0.0	104.1	33.3	119.2
Pediatric Quality Overall Composite	76.0	165.2	142.1	168.7	34.7	165.0	33.3	172.8

[113] New York State Open Data

[114] Medicaid Inpatient Prevention Quality Indicators, NYS Open Data

In addition, there does not appear to be a significant difference between the severity of illness or the risk for mortality for females discharged from the hospital by payer type.[115]

Table 60. Severity of Illness by Type of Insurance, Females Only

Severity of illness	*Private Health Insurance*	*Medicaid*	*Medicare*
Minor	54.77%	59.87%	59.87%
Moderate	38.69%	32.11%	32.11%
Major	6.03%	7.36%	7.36%
Extreme	0.50%	0.67%	0.67%

Table 61. Risk of Mortality by Type of Insurance, Females Only

Risk of mortality	*Private Health Insurance*	*Medicaid*	*Medicare*
Minor	93.97%	91.30%	91.30%
Moderate	3.52%	5.35%	5.35%
Major	2.01%	3.34%	3.34%
Extreme	0.50%	0.00%	0.00%

Communicable Disease

Vaccine Preventable Diseases

Overall, Chenango County students have a history of consistent, complete immunization. Nearly all students were completely immunized in all districts in the county during the 2017-2018 school year.[116]

Table 62. Percent of Students with Complete Immunization by District and School Year

School District	*2012-2013*	*2013-2014*	*2014-2015*	*2015-2016*	*2016-2017*	*2017-2018*
Afton Central School District	99.5%	99.0%	91.0%	99.6%	98.6%	98.6%
Bainbridge Guilford Central School District	99.9%	99.5%	99.6%	98.6%	99.6%	99.5%
Greene Central School District	98.9%	99.0%	99.0%	99.0%	98.9%	98.6%
Norwich City School District	98.8%	98.5%	98.3%	97.9%	99.1%	98.6%
Otselic Valley Central School District	96.2%	99.1%	98.2%	99.1%	99.7%	98.1%
Oxford Academy & Central School	98.8%	98.5%	97.5%	99.5%	98.3%	99.5%
Sherburne Earlville Central School District	99.3%	98.8%	99.3%	98.7%	99.2%	99.3%
Unadilla Valley Central Schools	98.2%	98.6%	96.5%	98.3%	98.4%	98.7%

Chenango County has steadily increased the percentage of children with 4:3:1:3:3:1:4 immunizations from a low of 49.5% in 2011 to 69.1% in 2016. The percentage of females aged 13-17 in Chenango County who had received the recommended 3 doses of HPV vaccine has also increased from 31.3% in 2011 to 42.5% in 2016. However, the county rate still lags behind the NYS rate of 50%.[117] Nearly all, 98.4%, infants born in Chenango County received their initial Hepatitis B birth dose. There is, however, room for improvement with influenza vaccination rates in Chenango County.

[115] SPARCS Hospital Inpatient Discharges, 2016
[116] School Immunization Survey: Beginning 2012-2013 School Year, New York Open Data
[117] NYS Prevention Agenda Dashboard

According to the 2016 eBRFSS, only 37.8% of Chenango County adults had received a flu shot. This rate is down from the 2014 rate of 49.8%. In addition, the percentage of people aged 65 and over in Chenango County who received a flu shot declined from 71.4% in 2014 to 54.5% in 2016, dropping below the NYS rate of 59.5%,[118] and far below the 2024 Prevention Agenda goal of 80%.

In 2016, 76.3% of people aged 65 and older in Chenango County had ever had a pneumonia shot, which is higher than the NYS rate of 69.3%. However, both pneumonia and flu hospitalization rates of people aged 65 and over in Chenango County have been consistently higher than state rates, even despite higher pneumonia vaccination rates.

Table 63. Chenango County Pneumonia/Flu Hospitalization rate (age 65 years and older) per 10,000[119]

Year	*Chenango County*	*NYS exc. NYC*
2005	197.4	196.1
2006	196.2	173.1
2007	178.7	161.0
2008	182.7	153.0
2009	159.3	139.5
2010	184.5	129.2
2011	150.5	130.9
2012	165.5	120.0
2013	191.9	116.4
2014	130.8	100.1

Data on immunization disparities between low-income households and their counterparts is not available on the county level nor is data on gender-specific rates of receipt of the HVP vaccine.

Opportunity

Coordinate Flu Shot Health Promotions: Continued efforts to educate and encourage individuals to get flu and pneumonia vaccinations by pharmacists, health care providers, employers, and other community partners could reduce the incidence of influenza and pneumonia among vulnerable populations.

Human Immunodeficiency Virus (HIV)

The incidence of HIV cases in Chenango County is extremely low and well below the Prevention Agenda goal of 5.2.

Table 64. HIV Indicators[120]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
HIV case rate per 100,000				
Age-adjusted	3.5*	7.3	Yes	2nd
AIDS mortality rate per 100,000				
Age-adjusted	1.4*	1.0	Yes	3rd

[118] eBRFSS
[119] NYS Community Health Indicator Reports – Communicable Disease Indicators
[120] Community Health Assessment Indicators, NYSDOH, 2013-2015

Sexually Transmitted Infections

Overall, the incidences of HIV and AIDS infections in Chenango County are too small for a meaningful analysis of trend or comparison, but are well below both NYS rates and Prevention Agenda goals. Syphilis and gonorrhea rates are also low in Chenango County and significantly less than NYS and the Prevention Agenda goals.

Chlamydia diagnosis rates in Chenango County remain below NYS rates and Prevention Agenda goals, but the incidence of chlamydia among females had been steadily increasing since 2006 hitting a high in 2013 when it exceeded the Prevention Agenda rate.[121] The chlamydia diagnosis rate of women aged 15-44 in Chenango County declined by 35% between 2013 and 2016, but the percentage of sexually active women aged 16-24 covered by Medicaid who had at least one chlamydia test is significantly lower than the NYS (excluding NYC) rate. This discrepancy between rates of testing and rates of diagnosis may indicate that with proper screening, a greater number of cases may be diagnosed.

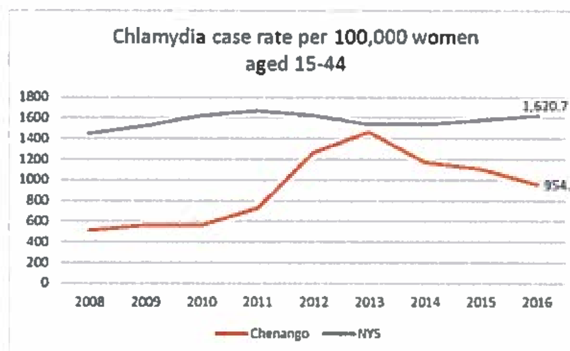


Table 65. Sexually Transmitted Infection Indicators[122]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Sig. Dif.*	*County Ranking Group*
Chlamydia case rate per 100,000 males				
All ages	154.4	217.9	Yes	2nd
Aged 15-19	468.3	581.0	No	3rd
Aged 20-24	1,095.8	1,149.5	No	3rd
Chlamydia case rate per 100,000 females				
All ages	420.6	474.9	Yes	3rd
Aged 15-19	2,064.1	2,260.5	No	2nd
Aged 20-24	3,172.3	2,762.7	No	4th
% of sexually active women aged 16-24 with at least one chlamydia test in Medicaid program (2015)	50.4%	66.4%	Yes	4th

Table 66. Chenango County Percentage of sexually active young women aged 16-24 enrolled in Medicaid with at Least One Chlamydia Test[123]

Year	*Chenango*	*NYS exc. NYC*
2011	43.4%	63.8%
2012	54.6%	64.7%
2013	48.0%	65.2%
2014	44.9%	65.1%
2015	50.4%	66.4%

[121] Prevention Agenda Dashboard
[122] Community Health Assessment Indicators, NYSDOH, 2013-2015
[123] County Health Assessment Indicators, NYSDOH, 2013-2015

Opportunity

Encourage Providers to Test Regularly: Outreach to providers encouraging chlamydia testing and education among high risk populations could reduce the possibility of a more significant STI outbreak in the county.

Hepatitis C Virus (HCV)

The number of people being treated for HCV has declined in Chenango County, but remains higher than the NYS rate. These data are not available by Medicaid status on the county level.

Table 67. Hepatitis C Rates per 100,000 Population by Type and Region

	Chenango		*NYS excl. NYC*	
	2014	*2017*	*2014*	*2017*
Acute	*6.1*	*2.1*	*1.0*	*1.8*
Chronic	*92.9*	*84.4*	*67.2*	*64.0*

Data detailing the number of HCV cases by drug status are not available.

Antibiotic Resistance and Healthcare-Associated Infections

Overall, CMH has had lower than expected rates of hospital-acquired infections between 2008 and 2017.[124] But Chenango County's antibiotic prescribing rate for acute respiratory infections in adults with Medicaid has consistently exceeded the NYS rates and is higher than the Prevention Agenda goal of 30%.[125]

Table 68. Potentially Avoidable Antibiotic Prescribing Rates for Acute Respiratory Infections, Adults 18-64, Medicaid by Year and Region

Year	*Chenango*	*NYS*
2010	51.97%	46.52%
2011	53.97%	46.88%
2012	58.6%	48.67%
2013	60.2%	44.94%
2014	50.82%	42.72%
2015	57.14%	41.92%
2016	55.84%	40.16%

[124] Hospital Acquired Infections, NYS Open Data

[125] Potentially Avoidable Antibiotic Prescribing Rates, NYS Open Data

Well-Being

The "Opportunity Index," developed jointly by Child Trends and Opportunity Nation, uses 16 indicators to measure the level of opportunity available to residents beyond simple economics.[126] Chenango County's 2017 Opportunity Score of 51.2/100 is somewhat lower than the 2017 NYS score of 56.4/100 and below the 2024 Prevention Agenda goal of 59.2, but increased from the county's 2016 score of 49.8. Chenango County lags behind the Prevention Agenda goal most significantly in the Community Score which includes disconnected youth, crime, access to primary health care, and availability of healthy foods.

	Opportunity Score	Economy Score	Education Score	Community Score	Health Score
Chenango County (2017)	51.2	54.1	50.2	39.1	61.3
Chenango County (2016)	49.8	52.9	47.0	38.4	60.8
NYS (2017)	56.4	48.9	56.0	57.3	63.6
PA Goal 2024	59.2	52.3	59.9	61.3	68.2

<u>Youth Disconnection</u>

Youth behavioral risk data is not available on the local level, however, 17% of Chenango County youth aged 16-24 are considered "disconnected."[127] According to the University of Wisconsin Population Health Institute, "Disconnected youth are at an increased risk of violent behavior, smoking, alcohol consumption and marijuana use, and may have emotional deficits and less cognitive and academic skill than their peers who are working and/or in school. Studies show that both a lack of educational attainment and unemployment is linked to depression, anxiety and poor physical health."[128]

In addition, data from the PRIDE survey conducted in 2015 show that nearly half of high school students never take part in community activities, and over a third of them never take part in school activities. Participation in activities is an important protective factor in mitigating or eliminating the risks of substance use and mental health disorders among youth.

<u>Senior Disconnection</u>

A number of focus group participants commented on the social and physical isolation that affects seniors in Chenango County. They suggested that this isolation has a negative impact on overall well-being as well as physical and emotional health. One focus group participant shared, *"One of the things I heard about in recent days is male isolation. Men have much more trouble maintaining social contacts than women do throughout much of their lives. And I think that is a significant issue, perhaps for me and men in retirement, [not]having formal efforts to address it. It's not unique to men, it's just more common around men. When I was [working], one thing that impressed me was many people from larger metropolitan areas fall in love with rural life, make a move around retirement and find themselves to be very isolated because they don't have those social contacts. It's much more difficult to establish those contacts compared as when you have a two-year-old or five-year-old running around the house. That isolation is a problem for new retirees of the community, and we have a fairly significant number of them. When they're healthy, they can maintain those contacts by driving three hours back to wherever they came from, but at some point they find it more difficult. Isolation is a significant issue."*

[126] https://opportunityindex.org
[127] Not working or in school
[128] http://www.countyhealthrankings.org/app/new-york/2017/measure/factors/149/description

Focus group participants also noted a lack of services for people with dementia or memory problems. One participant shared, *"There are absolutely no services in Chenango County if you have anyone with dementia or memory care issues. If you are in need of services for an elderly person to assess, they're always going to tell you that you don't qualify. They will then send you someplace out of county, but bottom line there is nothing unless you have the resources to send your person to a care facility. There is nothing for dementia or elder care."* Another participant said, *"Their groups are not even useful. I think I've exhausted every option. AAA, DSS, the crisis team, they all come over to interview my mother and they all say they can't do anything. There are no services especially for someone in crisis. My mom has dementia, she's brilliant, she cycles in and out, she's now in nursing care. It was a long road and none of the agencies were helpful. My mom was resistant to HelpLine, but they don't even get that for you."*

Opportunity

Intergenerational Community and Volunteer Activities: Creating relationships between young people and older people offers the opportunity for development of self-esteem of young people while reducing social isolation for vulnerable seniors.

Mental Health

In 2016, both the Chenango County age-adjusted rate of adults reporting 14 or more days with poor mental health in the last month, 17.6%, and the crude rate, 13.0%, exceeds the Prevention Agenda goal of 10.6%. According to 2016 data, 14% of Chenango County residents have been told they have had a depressive disorder at some point in their lives.[129] This rate is higher than the NYS rate of 11.7%. Within the Southern Tier, Chenango County has higher antidepressant medication adherence rates as compared to the rest of the region, but the rates are below the DSRIP goal of 60% for acute treatment and 43.5% for continuation treatment.

Table 69. Percent of Patients who Adhere to Antidepressant Medication by Treatment Phase and County[130]

County	*Effective Acute Phase Treatment*	*Effective Continuation Phase Treatment*
Broome	53%	38%
Chenango	58%	40%
Delaware	64%	42%
Tioga	58%	34%
Tompkins	50%	38%
Southern Tier Region	54%	38%

Chenango County's rates of emergency room visits due to mental health are higher than NYS rates for both adults and children under age 18, but the hospitalization rate for both adults and children is much lower.[131] This discrepancy may suggest that county residents rely heavily on the emergency department for issues that may be better addressed in another setting.

[129] eBRFSS
[130] Southern Tier DSRIP Region Needs Assessment, NYSOMH, December 2016
[131] Retrieved from http://healthlinkny.com/community/community-dashboard/ November 21, 2018

Table 70. Mental Health ER and Hospitalization Rate (Age Adjusted per 10,000 Population)[132]

	Chenango	*NYS*
Adult ER rate due to mental health	112.7	108.9
Pediatric ER rate due to mental health	116.0	90.6
Adult hospitalization rate due to mental health	50	60.6
Pediatric hospitalization rate due to mental health	3.6	19.3

In Chenango County, there are no psychiatric inpatient beds for adults. An average of 11 Chenango County adults are in psychiatric inpatient treatment out of county each day. There is one psychiatric residential treatment facility in Chenango County for children with 18 beds. An average of seven Chenango County children are in psychiatric inpatient treatment per day.[133] There are no outpatient clinics in Chenango County and one locally operated mental health clinic offered through the county's Office of Mental Health. In 2017, a total of 1,130 people received services from the Chenango County Mental Health Clinic. The majority (92%) were people eligible for Medicaid benefits. Only 65 county residents received care through a community support program.[134]

Table 71. Number of Chenango County Residents Receiving Mental Health Services in 2017 by Type of Service and Age Group

	Total	*Adult*	*Child*
Medicaid Clinic	1041	729	312
Non-Medicaid Clinic	89	64	25
Emergency	11	10	1
Residential/Housing	99	66	33
Community Support Programs	65	34	31
Home & Community Based Programs	6		6

According to DSRIP data, 3,824 Chenango County residents eligible for Medicaid received clinic, ER or practitioner services for a mental health disorder. Of those only 2,413, or 63.1%, received services within the county.[135] Based on information from key stakeholders and focus group participants, this is due to a lack of availability of providers as well as dissatisfaction with the providers available in the county.

Key stakeholders and focus group participants frequently noted mental health disorders as a pressing issue facing Chenango County. Both groups also agreed that the lack of mental health providers is a difficult problem in the county. One stakeholder said, *"There are not enough mental health services here across all types of needs. We only have one psychiatrist across the whole county. Our primary care physicians get nervous about prescribing medications for people with mental health or behavioral issues because that's not their expertise. There isn't anybody that you can consult in a timely fashion to prescribe the right medications or refer that person. That is a really, really serious issue around here."* Another mentioned, *"I also think the mental health services is an issue. We really have a need for more of it. I know that people do have to wait quite a while and that puts pressure on primary care to deal with someone more. They're capable, but we want them to see a specialist sometimes for severe and persistent mental health issues. The primary care physicians through UHS pick up medication for less severe issues, but counseling is difficult because they don't take insurance. I think that is limited."* Another stakeholder said, *"I think the other component is access to different services. Our county doesn't*

[132] County Health Assessment Indicators, NYSDOH, 2012-2014
[133] Southern Tier DSRIP Region Needs Assessment – December 2016
[134] County Capacity and Utilization Data Book, CY 2016-2017, NYS OMH https://www.omh.ny.gov/omhweb/special-projects/dsrip/docs/county_utilization_data_book.pdf Retrieved 12/10/18
[135] DSRIP Dashboard

have a lot of services especially for those coming from a hospitalization setting. Their outpatient treatment is important, but other activities they engage in are too. In Oxford or Sherburne, there aren't even support groups. Especially for our children services, a lot of those services are in other counties and have age restrictions. Under the age of 12, if they can't travel 45 minutes to an hour to those services, they don't receive them. For children especially, parents are always requesting respite services, but the only thing offered is if they're over 12 years old and, again, that's in the neighboring counties and it's a residential program so they would have to stay there 14 days. There is no hourly respite." Focus group participants agreed with the stakeholders' assessments. One participant noted a need to bring mental health services to communities. Another said, *"There is a stigma in wanting to go and get [mental health] services. it would be nice if there were more services available."*

Chenango County, as a whole, has been federally designated as a Health Professional Shortage Area (HPSA) for mental health and the Medicaid population in the county has been designated as a Medically Underserved Population with respect to mental health.

Table 72. Number of Mental Health Professionals by Type and Region

Licensed Mental Health Professional Type	*Chenango County*	*Southern Tier Region*
Psychiatrists	0	58
Psychologists	4	155
LCSWs	43	583
LMSWs	33	515
Mental Health Counseling	3	58
Nurse Practitioner – Psychiatry	1	34
Other	3	56
Total	87	1459
Per 10,000	17	32

Key informants and focus group participants remarked on the potential stigma associated with accessing mental health care services in the county. One stakeholder said, *"We have behavioral health and drug and alcohol in the same clinic. This situation is disturbing to some of the clients because they're rushed through services because of the [billing structure]. A lot of clients feel their needs are not being met, and that they are just a number. The other situation is the way the clinic is set up is not a very anonymous or friendly environment. Where they go, there is no waiting room, they are lined up in the hall. We hear this all the time. It's not a therapeutic environment."* A focus group participant said, *"We have behavioral health, but it's just a cattle call. A lot of people aren't happy to go there, but there are no other options. Medicaid doesn't cover private care and people can't afford to pay out of pocket."* A stakeholder also mentioned poor mental health care available through the emergency room. She said, *"At the emergency room, there's a huge distrust in services provided. A lot of clients have not been happy with services and don't feel they can go there and opt to go an hour away for emergency services. I think they're often rushed through and not taken care of and looked at and have to often go back a second time. They just don't feel safe because of that."*

A faith leader commented on the importance of offering people with mental health disabilities the opportunity to be self-sufficient and have purpose. She said, *"I think the mental health issue is huge. Often the people who come [to the church] are broken, have issues, and in many of these cases, these individuals are out on disability or out with some mental health circumstance. My message is always 'this doesn't have to be your permanent reality.' My approach is maybe you can help by serving coffee, handing out bulletins, learn social skills, and responsibility so you can get back into the workforce. I just*

feel like we've done a disservice for people who fall into that category by writing them off saying they're not capable. I don't know how much is being done to challenge them to consider that their circumstance doesn't have to be a life sentence. Recovery is possible in some circumstances."

Mental Health Adverse Outcomes

While data on suicide attempts is not currently available on the county level, information on suicide mortality and self-inflicted injury is. In Chenango County the age-adjusted suicide mortality rate, 10.3 per 100,000 population, exceeds the NYS rate of 7.9 and the 2024 Prevention Agenda goal of 7.0.[136] The suicide mortality rate of people aged 15-19 years in Chenango County also exceeds the NYS (excluding NYC) rate. Looking at the crude rates across time for adolescent suicide mortality, the number of suicides in Chenango County varies dramatically year to year. The self-injury hospitalization rate of the same age group has also varied over time. The most recent data available suggests a higher number of Chenango County youth are self-injuring than in NYS overall (excluding NYC).

Table 73. Suicide Mortality rate per 100,000 population – 15-19 Years

Year	*Chenango County Single Year*	*Chenango County 3-Year Average*	*NYS exc. NYC*
2007	0.0*		4.5
2008	0.0*	0.0*	3.6
2009	0.0*	9.4*	4.9
2010	28.5*	9.4*	6.1
2011	0.0*	9.8*	7.0
2012	0.0*	0.0*	7.1
2013	0.0*	0.0*	4.6
2014	0.0*	10.8*	6.0
2015	0.0*	11.1*	5.4
2016	33.7*		6.9

Table 74. Self-Injury Hospitalization Rate per 10,000 Population – 15-19 Years

Year	*Chenango County 3-Year Average*	*NYS exc. NYC*
2014	22.6*	8.7
2016	20.2*	8.7

Substance Use

Focus group participants noted that substance use disorders are a pressing issue facing the county. Several participants suggested that overprescribing of opiates was a key challenge as is the lack of services available to people with addictions. One participant said, *"The drugs are running rampant."* Another said, *"I would say the drug abuse is a huge medical problem that we can't take care of on our own. We have no services to offer them."* Another participant shared, *"You're really talking about pharmacy abuse and doctors that hand out drugs like candy. It's a big problem in this area."*

Key informants also frequently noted substance use as an important issue to address in the county. One stakeholder said, *"Drug abuse is a major, major issue. Anybody can see people who are clearly drug addicts walking down the street, walking through my parking lot. It's an epidemic with opioids, but plenty of people are still using meth."* Another stakeholder noted the impact of substance use on families and children. She said, *"I think for me [the most pressing issue] would be the opioid epidemic,*

[136] County Health Assessment Indicators, NYSDOH, 2014-2016

because it touches on so many different realms of our clientele. Right now, I'm thinking of the children and the babies. [Years ago] there were a few drugs out there that affected kids, but for the most part it was alcohol. You could work with alcoholics and get them to try to be on the right track. But when you're talking about heroin and meth, these parents don't care, you can't actually engage them. It's like you're in a different universe. And ... the cost to the taxpayers of trying to take care of these people and their medical and mental health programs...it's draining on all the different areas I think."

There are two substance use disorder inpatient rehabilitation options available regionally (in Broome and Delaware counties), but none within Chenango County. In county, the substance use disorder clinic is located within the County Mental Health Clinic and it has an average daily enrollment of 129 people.

The number of Chenango residents receiving chemical dependent Office of Alcoholism and Substance Abuse Services (OASAS) Medicaid services was mainly steady for the past 3 years. A small percentage of the people receiving services from the substance use disorder clinic received detoxification services (5.6%) in 2017.[137]

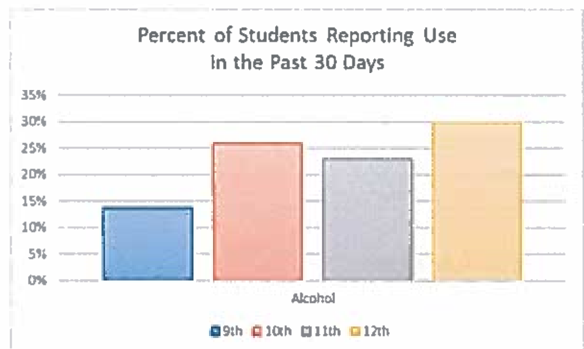
Table 75. Number of People Served by Chemical Dependency Services by Year and Type

	Number of recipients	
Year	All Chemical Dependency Services	All Detoxification Services
2015	438	20
2016	470	26
2017	444	25

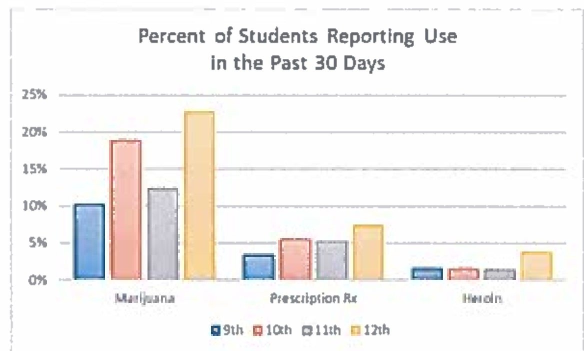
While substance use disorder prevalence data is not available on the county level, several other indicators suggest that the population experiencing challenges with substance use has been increasing.

Underage Substance Use

While none of the focus group participants or key informants suggested that underage drinking in Chenango County is a problem, data suggest it may in fact be an area of concern. A third, or 33.7% of students in grades 6-12 participating in the 2015 PRIDE survey indicated that they had used alcohol in the past year and 17.3% said they had in the past month. Nearly a third, 29.8%, of 12th graders said they had used alcohol in the past month, a rate higher than the 2024 Prevention Agenda goal of 27% (for grades 9-12.) Nearly two thirds (60.8%) of 12th graders said alcohol is fairly or very easy to obtain, suggesting that access is an important aspect of preventing alcohol consumption among high school students.



The 2015 PRIDE survey showed that a significant percentage of students in Chenango County were current users of alcohol and marijuana. A small number of students also reported using prescription drugs and heroin. Worth noting is the nearly 23% of 12th graders reporting using marijuana.

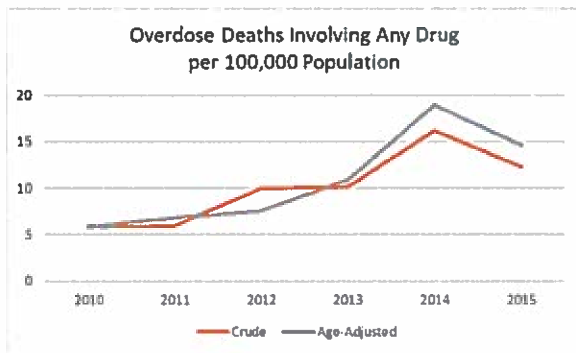


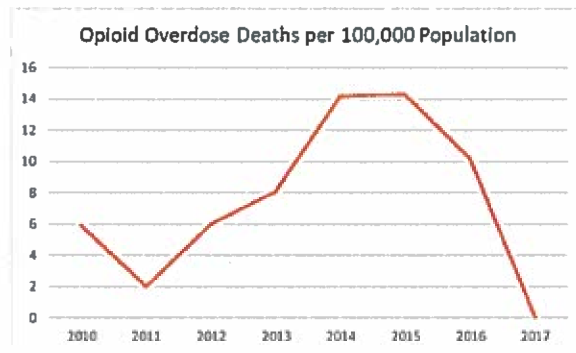
[137] OASAS Medicaid Trend Detailed Recipient Summary Profile: Current 3 Year Window, NY Open Data

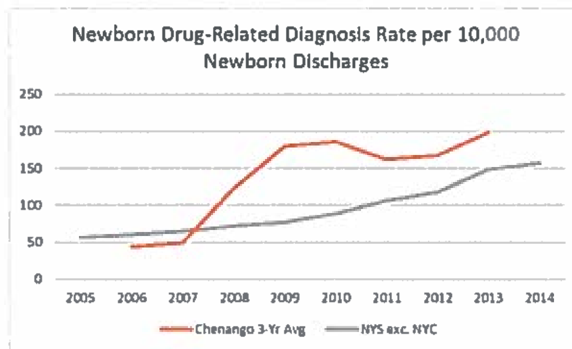
The percentage of adults in Chenango County reporting binge-drinking increased from 11.3% in 2014 to 15.5% in 2016.[138] The rate is below the NYS rate of 17.5% in 2016 and slightly just below the 2024 Prevention Agenda goal of 15.8%.

Substance Misuse Adverse Outcomes

In 2015, Chenango County's age-adjusted rate of overdose deaths from any drug, 14.6 per 100,000 population, was higher than the 2024 Prevention Agenda goal of 12.4. However, more recent data from 2016 and 2017 show the number of deaths related to opioid overdoses alone has decreased in Chenango County over the past few years. These data suggest, and key stakeholders agree, that opioid use has declined in the county. Stakeholders also suggested that the decline in opioid use has corresponded to an increase in methamphetamine use.







Another key indicator of substance use is the number of babies born with a drug-related diagnosis. The most recent Chenango County rate of 198.7 per 10,000 newborn discharges is 34% higher than the NYS (excluding NYC) rate. The rate increased dramatically between 2007 and 2013. Because the most recent data is from 2013, it is unclear whether these rates have also declined in tandem with the decline in opioid overdose deaths.

[138] eBRFSS

Adverse Childhood Experiences (ACES)
In 2016, 380 Chenango County children were identified as victims of one or more substantiated allegations through Child Protective Services (CPS). Chenango County's rate of 35.04 per 1,000 children was more than double the state-wide rate of 14.51 and well above the 2024 Prevention Agenda goal of 10 per 1,000.

The rate of children who live in families with a preventive services case in Chenango County, 101 children or 9.31 per 1,000 children,[139] was similar to the statewide rate of 9.80. However, the number of these families who had a substantiated CPS allegation within 12 months of the opening of their preventive case (32.0%) was significantly higher than that of New York State as a whole (15.7%). Chenango County also has a higher rate of children (29.56%) with new substantiated reports within 12 months of the first report than New York State as a whole (18.09%). These data indicate that children in Chenango County are experiencing neglect or abuse at a higher rate than NYS and that the neglect or abuse is continuing for a high portion of those children even with preventive services.

Opportunity

Parenting Classes: Classes could be developed for at-risk parents to help them learn better strategies for caring for their children. Ideally, the classes would be free of charge and offer child care and transportation and incentives for participation.

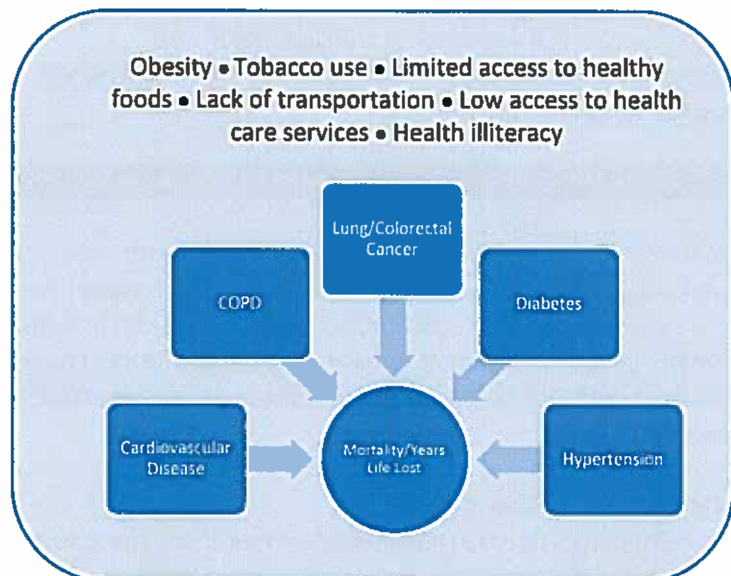
[139] 2016 Bright Spots Data Package, Office of Children and Family Services, September 2017, https://ocfs.ny.gov/main/cfsr/child-welfare-data.asp

Primary Health Challenges Facing Chenango County

Chenango County is faced with several overarching issues including an aging population, economic decline, geographic isolation, and a lack of health care services. Largely rural and with a relatively small population, the county's lack of public transportation and limited resources combine to create barriers to good health for individuals and families across all demographic groups. For people with limited incomes, these challenges are exacerbated significantly. The two most widespread areas of concern are chronic disease and mental health.

Chronic Disease

The most prevalent, serious and costly health problems facing the county are preventable chronic diseases such as cardiovascular disease, lower respiratory disease, lung and colorectal cancers, diabetes and hypertension. Chenango County has the highest age-adjusted mortality rate and the worst pre-transport mortality rate for cardiovascular disease, and the second highest age-adjusted mortality rate for chronic lower respiratory disease in the state. In addition, the county has the highest age-adjusted mortality rate overall and one of the worst age-adjusted emergency department visit rates. The primary drivers of these challenges are Chenango County's high rates of obesity, tobacco use, and health illiteracy.



These negative health outcomes cross all economic and demographic categories, but low-income individuals and families are at particular risk for chronic disease and often lack the resources and knowledge to manage their illnesses. Several social determinants of health associated with low socio-economic status are prevalent in Chenango County, such as access to healthy foods, access to health care services, and consistent, reliable transportation. In Chenango County, the number of potentially preventable emergency department visits is higher for low-income individuals (Medicaid beneficiaries) than the population as a whole. Stakeholders and community members noted that over-use of the emergency department puts a strain on the system. These data suggest an opportunity to address a health disparity that impacts both the health of the low-income population and the healthcare delivery system available to all Chenango County residents.

Mental Health and Well-Being

Chenango County's rate of adults reporting 14 or more days with poor mental health in the past month exceeds the 2024 Prevention Agenda goal. Also, the age-adjusted suicide mortality rate in Chenango County exceeds both the NYS rate and the 2024 Prevention Agenda goal. Chenango County's rates of emergency room visits due to mental health are higher than NYS rates for both adults and children under age 18, but the hospitalization rate for both adults and children is much lower. This discrepancy may suggest that county residents rely heavily on the emergency department for issues that may be better addressed in another setting. Compounding the issue, the county is designated as a health professional shortage area for mental health and lacks psychiatric services. Community members and

key stakeholders said that they desired more services to address these issues, but current funding constraints present significant barriers to developing programs, creating new services or recruiting providers.

Youth, in particular, are at risk for poor mental health outcomes in the county. The suicide mortality rate of people aged 15-19 years in Chenango County also exceeds the NYS (excluding NYC) rate. In addition, data suggests a higher number of Chenango County youth are self-injuring than in NYS as whole (excluding NYC). Evidence of adverse childhood experiences includes the county's very high rate of substantiated allegations of abuse, which may be a key contributor to some of these outcomes. Data also show that 17% of county youth are considered "disconnected" and over a third of high school students are not involved in school activities that would mitigate risks of mental health issues. Older adults in the county are also at risk for social isolation due to lack of transportation and geographic separation and pose an additional age-related opportunity for intervention.

Summary of Assets and Resources

When asked to describe the strengths of the health care system in the county, community members and stakeholders most frequently remarked on the hospital, local community-based organizations, primary care providers and the collaborative approach used to address community issues. Despite the relatively small number of community based organizations and limited resources within the county, information from CMH, CCPH, and CHN (below) show significant efforts to work together to address county health issues.

Department of Public Health

The Chenango County Department of Health receives its legal authority to operate through licensure by the New York State Department of Health. The Chenango County Board of Supervisors oversees the continued operation of the department. A full-time Public Health Director is authorized to manage the department's four divisions: Nursing, Environmental Health, Children with Special needs and Codes Enforcement. The department also employs a part time Emergency Preparedness Coordinator. A financial officer provides budgetary support to each of the divisions.

Chenango County contracts with a local physician affiliated with the Bassett Healthcare Network to serve as the Department's Medical Director. The Medical Director consults with all divisions within the Health Department. The Medical Director is responsible for medical policy and procedure review; providing medical opinions on population-based programming and risk; providing medical management recommendations for victims of mass casualty; chairing the Health Services Advisory Committee; authorizing plan-of-action care for the Children with Special Needs Program; providing medical consultation on communicable disease outbreaks; and providing staff in-service training. The Medical Director is also responsible for the Health Department's Quality Assurance Program.

The Nursing Division full time staff includes 9 RN's, 1 Health Educator, and 2 Supervising Administrators (DPS and SCHN) as well as 12 per diem nurses, contracted Medical Social Workers and a Nutritionist. The

Nursing Division management participates in 14 County work groups, coalitions and advisory committees in partnership with many local agencies and organizations including:

- Head Start Professional Advisory Committee (SCHN)
- S-E Schools Professional Advisory Committee (SCHN)
- Mental Health Subcommittee (DPS)
- Central Region Immunization Coalition (SCHN)
- Chenango Substance Abuse Coalition (DPS, SCHN, staff)
- Early Intervention Coordinating Council (DPS)
- United Way Dental Task Force (DPS, staff)
- Area Agency on Aging Long Term Care Counsel (DPS)
- Area Agency on Aging No Wrong Door Transition team (SCHN)
- Breast Feeding Coalition (DPS, SCHN, staff)
- Building a Healthier Community (SCHN, staff)
- NYLinks Central Region Coalition (SCHN)
- Harm Reduction Subgroup Co Chair (DPS)
- Interagency Care Counsel (staff)

The Department collaborates routinely with local institutions including schools, churches, physicians, pharmacists, businesses and organizations in order to improve the health status of county residents. The Public Health Department maintains linkages with an array of health and human service providers as a means for expanding and strengthening the local public health system. Because Chenango County is a small, rural county, many of the collaborating partners participate in several coalitions and planning groups. These agencies and groups face decreasing funding and staffing, but continue to be held to more regulation and mandates.

The Nursing Division works very closely with the Environmental Division in several programs and projects. The two divisions collaborate on food borne outbreaks, arthropod investigations, rabies case management, health education topics, and environmental safety issues. Environmental staff participates in community immunization & flu clinics as the need arises.

In addition to this collaboration, the Nursing Division is responsible for the implementation and oversight of many programs and projects (see page 71 of this document for a full listing). Nursing staff hold certifications in 7 areas including lactation counselors, fall prevention programs, Baby & Me Tobacco Free counselors, and car seat technicians.

Nursing Division Programs

Lead Poisoning Prevention Program
Communicable Disease Investigation, Case Management
STD investigation, Case Management, Project Venus
Arthropod Investigation, Case Management
Tuberculosis Investigation, Case Management and clinic (every other month)
Rabies post exposure prophylaxis and follow-up
Immunization Clinics

- weekly clinic
- Monday & Friday Office
- Outreach Community Flu Clinics (15+ clinics)

Family Health Promotion

- Birth Calls (breastfeeding, spacing and other)
- 6month Calls (breastfeeding)
- Birth Mailings (Drink guidelines, dental and resource booklet)
- Home visits (Nursing, Certified Lactation Consultation, Nutrition and MSW)
- Prenatal Yoga (supports healthy birth outcomes)
- Safe Sleep Crib Program

Baby & Me – Tobacco Free Program (supports health birth outcomes)
Annual Community Campaign (Nurse and Health Educator)
Stepping On (Fall prevention program for Senior Citizens)
Partnership with Local Department of Social Services

- Personal Care Aid Assessments
- PRI/Screens for Nursing Home Placement
- Annual PRI/Screens for Preston Manor Residents
- Traumatic Brain Injury Waiver Program care plans
- Care At Home Waiver Program care plans
- Nursing Home Transition/Diversion Waiver care plans Emergency Preparedness trainings/PODS

New York Connects Program

- NWD Screens via Peer Place
- Information & Assistance
- Options Counselling
- Transition of Care
- Linkage to Care
- Assist with Application Processes
- Statewide Resource Directory Maintenance
- Program Outreach and Promotion
- Public Education
- In Home Fall Screens
- Referral to Stepping On Program
- Data Collection and Reporting

Work plans/Annual State Reporting

- Lead work plan, deliverables, & quarterly reports
- Immunization, work plan, deliverables, & reports TB program quarterly reports
- Employee state Flu report
- LHCSA statistical report

Nursing Division Projects

Promote the "Baby Nook" with Certified Lactation Consultant support services
Partner with STAP-Fixed Needle Exchange Site
Safe Sleep Campaign – Education and Updates 2019
Rethink Your Drink: Chenango Campaign 2019
Provider Detailing Visits (HPV, Postpartum Depression and Baby & Me-Tobacco Free Program)
Staff Certifications trainings

- Certified Lactation Counselors (4)
- Certified Trainers: Stepping On Fall Prevention (2)
- Certified Car Seat Technicians (1)
- Certified in PRI/Screen completion (3)
- Certified Baby and Me Tobacco Free Program Facilitators (4)

UAS computer assessment/ training (Ongoing)
Peer Place computer assessment/ training (Ongoing)
Emergency Shelter Staff training/Drills
Disease outbreak incident command (Ongoing)
Referral source for Health Exchange Navigators
Ebola response training (Ongoing)
New Work Plans/State Reporting
Emerging Disease Action Plans and reporting (Zika, Ebola)
Partner with United Way to provide dental supplies and education in schools (Target – Elementary)
Maintenance of resource booklet for new families
Prevention Agenda annual updates
Community Health Assessment and Community Health Improvement Planning 2018-2021

Hospitals
UHS Chenango Memorial Hospital is a 138-bed facility located in Norwich, NY, and is affiliated with United Health Services. The hospital provides numerous services as listed in the table below.
The hospital operates the only Emergency Department in Chenango County. It is physician staffed 24/7 and consistently has over 18,000 visits per year.

UHS Chenango Memorial Hospital is a major employer in the county employing 543 individuals, 380 work full-time. The hospital contracts with an additional 61 people to provide security, dietary, housekeeping and therapy services. The medical staff consists of 73 licensed professionals including 43 physicians and 30 physician assistants and nurse practitioners. The hospital also provides its patients with access to care coordination services through the placement of wellness coordinators in all of its primary care offices. In addition, it should be noted that UHS Chenango Memorial's footprint extends into Delaware County with a health center in Sidney. Delaware Valley Hospital is located in Walton, also in Delaware County, and is affiliated with United Health Services as well.

Table 76. Chenango Memorial Hospital Services

Acute Services	*Physician Services*
Medical/Surgical	UHS Pediatrics -Norwich
Intensive Care	UHS Primary Care -Norwich
Maternity	UHS Primary Care -Oxford
Observation	UHS Primary Care - Sherburne
Swing Bed Program	UHS Primary Care - Sidney
	Geriatrics
Ambulatory Services	CMH OB/GYN
Emergency Room	CMHOB/GYN
Ambulatory Surgery	CMH General Surgery
Special Procedures	UHS Cardiology & Rehabilitation
Clinical Laboratory	GI Clinic
Physical Therapy	Orthopedics
Occupational Therapy	Pain Management Clinic
Speech Therapy	Oncology
Magnetic Resonance Imaging	Ophthalmology Surgery
Ultrasound	Podiatric Surgery
Mammography	Vascular Surgery
Cat Scan	
Nuclear Medicine	*Residential Health Care Facility*
Imaging – Diagnostic	Long Term Care
	Short Term Rehab

Chenango Health Network
Established in 1995, CHN is a community-based, not-for-profit rural health network whose mission is to bring together health and human services professionals, business people and consumers to strengthen health care in Chenango County. CHN is dedicated to improving access to health services for Chenango County residents. As a result, CHN focuses much of its efforts assisting the uninsured, underinsured and medically underserved populations of Chenango County.

The organization is governed by a Board of Directors consisting of 7-16 members who represent senior level management of health and human service providers and businesses as well as community members. Members bring the perspective of their particular profession and organization, the ability to

make policy level decisions, an understanding of issues and community, influence among their peer group and community in general, willingness to work collaboratively and a strong commitment to the purpose and goals of the network. CHN convenes and facilitates meetings among representatives of the local public health system to assist with program development, implementation and evaluation; to collaborate on specific initiatives; to coordinate services; and to carry out specific activities in Chenango County.

CHN offers the following services:

- *Cancer Support Group* - A group of individuals with common experiences or concerns who provide each other with encouragement, comfort, and advice.
- *Care Transitions/Health Coach* (based on the Coleman Model) - Involving the patient and family in discharge planning can improve patient outcomes, reduce unplanned readmissions, and increase patient satisfaction. The goal is to reduce 30-day avoidable hospital readmissions.
- *Chenango Substance Abuse Prevention Coalition* (CSAPC) - The mission of the Coalition is to bring individuals and organizations together to promote a clean, safe, and addiction-free community.
- *Chronic Disease Self-Management Programs (CDSMP), Diabetes (DSMP) Chronic Pain (CDSMP)* - workshops designed to help people gain self-confidence in their ability to control their symptoms and learn how their health problems affect their lives.
- *Community Health Advocate Program* – Community Health Advocates assist individuals with a wide range of health related issues from finding a health care provider to understanding medical bills.
- *Dental Project* - This initiative provided a dental kit to each student in Chenango County up to fifth grade. The dental kits included a toothbrush, toothbrush cover, toothpaste, floss and educational materials on proper brushing techniques.
- *Emergency Department Navigation Services* - A Case Manager educates patients on how to access health care and other needed services such as transportation to medical appointments, and provides patients with the skills and tools needed to assert a more active role in their care and ensure their needs are met
- *Financial Assistance Program* - Assists individuals with a breast or gynecological cancer diagnosis pay for treatment and/or other needs related to their cancer diagnosis.
- *Health Insurance Navigator Assistance Program* – Trained Navigators assist individuals to apply for health insurance through the New York State of Health Insurance Marketplace.
- *Prescription Assistance Program* - Assists individuals with enrollment into pharmaceutical companies' patient assistance programs so that medically underserved individuals are able to obtain medicines needed to manage their health.
- *Whole Health Action Management (WHAM)* – this program is a person-centered support group-style workshop, which engages participants to identify strengths and supports in 10 science-based whole health and resiliency factors.
- *Workplace Wellness Mental Health Toolkit* - The toolkit is to assist employers to support employee mental health in the workplace. The tool kit contains materials to make mental health wellness an organizational priority by promoting discussion and treatment of behavioral health issues.
- *Youth, Adult, Fire & EMS Mental Health First Aid* – is a public education program that introduces participants to risk factors and warning signs of mental health problems in adolescents. The program builds understanding of the importance of early detection and intervention.

Other Medical Services in Chenango County

Primary Care Offices

In addition to the UHS Chenango Memorial Hospital's outpatient offices, UHS maintains a primary care center in Greene and Bassett Health Care Network has family health centers in Sherburne, Greene and Norwich as well as school based clinics in the Sherburne-Earlville and Unadilla Valley school districts.

Family Planning of South Central New York maintains a clinic in Norwich and the Albany Stratton VA maintains an outpatient clinic in Bainbridge. There are six private practice physicians, four in the Norwich area and one in Bainbridge and a privately owned family health center is located in Afton (Afton Family Health Center).

Dental Care

There are 13 dental practices employing 17 dentists in Chenango County. There is one Orthodontics practice employing two Orthodontists, and no pediatric dentists. There are no dental offices accepting Medicaid, down by two practices from the time of the last Needs Assessment. Chenango County NYSARC does maintain an Article 16 dental clinic through a satellite arrangement with the Broome Developmental Disabilities Services Office.

Long-Term Care and Short-Term Rehabilitation

UHS Chenango Memorial Hospital is one of the few hospitals in New York State that includes a skilled nursing facility. There are a total of five residential health facilities in the county, all of which maintain Medicaid and Medicare certifications. UHS Chenango Memorial Hospital is licensed for 80 long-term care beds. Some of the beds are used for short-term rehab, primarily for orthopedic patients recovering from surgery.

There are no NYSDOH-licensed assisted living facilities in Chenango County. There are seven adult residential care facilities, three of which are licensed by New York State.

Other Community Partners

- United Health Services (UHS)
- Delaware County Department of Health
- Local Businesses
- Mothers & Babies Perinatal Network
- Norwich YMCA
- Cornell Cooperative Extension
- Catholic Charities
- Liberty Partnership
- New York Connects
- Public Libraries
- Various Community Foundations
- Chenango County Office of the Aging
- Chenango County United Way
- Local School Districts
- Chenango County Mental Health Services
- Hospice & Palliative Care of Chenango County
- Friends of Rogers
- Care Compass Network
- Crouse Hospital
- Opportunities for Chenango and Headstart
- Women, Infants & Children (WIC)
- Community Foundation of South Central New York

Community Health Improvement Plan/Community Service Plan

Priority Selection Process

Chenango County engaged in an iterative process to select the priorities and activities for the CHIP/CSP. The process allowed for significant input from stakeholders and integrated feedback from the community.

Step 1: A draft assessment report based on a comprehensive review of indicator data and qualitative data collected from community members and key stakeholders (Appendix I) was completed by Horn Research on December 31, 2018.

Step 2: On January 28, 2019 a stakeholder meeting with key community partners was convened to share the preliminary results of the assessment. A presentation was provided which included areas where there was convergence in indicator information and qualitative data (Appendix II.) After the presentation, participants were asked to participate in a ranking activity to provide a first cut of the priority selection. Each stakeholder was given five stickers and asked to place them on the Prevention Agenda Focus Areas they believed should be selected for the CHIP/CSP. Participants were allowed to disburse their stickers in whatever way they preferred which allowed them to weight their preferences. The ranking activity resulted in the identification of four main focus areas:

- Mental Health and Substance Use Prevention
- Healthy Eating and Food Security
- Child and Adolescent Health
- Preventive Care and Management.

Step 3: The Needs Assessment Committee then reviewed the data, goals and objectives related to these four focus areas. They identified current and potential programming, and assessed the feasibility of addressing them. This process resulted in the selection of eight goals related to these four focus areas (Appendix III).

Step 4: A second stakeholder meeting was convened on April 8, 2019 to map out current resources to the abovementioned focus areas and related goal areas. The mapping process identified opportunities for collaboration and enhancement of programming to address potential gaps in service and improve community health outcomes (Appendix IV).

Step 5: Based on the results of the mapping process, the Needs Assessment Committee selected interventions with the greatest opportunity to optimize on current resources and that would have the greatest impact on the focus areas related to the county's most significant health issues.

Selected Priority Areas and Interventions

Prevent Chronic Disease: Preventive Care and Management

With high mortality rates for several chronic diseases, Chenango County faces a significant challenge in assisting county residents in effectively managing their conditions. Horn Research conducted an analysis of the potential health care costs as well as the years of life lost and potential earnings loss associated with these diseases in the county (Appendix V). The results show a need for increased healthy behaviors and better disease management among Chenango County residents. Low-income individuals and families are at particular risk for chronic disease and often lack the resources and knowledge to manage their illnesses.

CHN has recently incorporated the evidence-based *Chronic Disease Self-Management Program* into the services they offer. The program successfully taught self-management skills to 59 Chenango County residents in 2018 and CHN is currently conducting and scheduling more workshops in 2019. Program results show a clinical reduction in A1c levels in participants as well as increased knowledge of disease self-management and a better understanding of their health and physical activity. The program's early success coupled with the high need for individual self-management improvement clearly show the suitability of investing in the program more broadly.

Chenango County proposes to expand the Chronic Disease Self-Management Program by establishing a referral process of newly diagnosed patients through the hospital, incorporating the hospital's head dietician and chef into the program's curriculum, creating a referral process through the health department's programs, and exploring having health department staff become trained as peer leaders.

A special emphasis will be placed on partnering with and recruiting from community-based organizations who work with low-income individuals and families to address the health disparities associated with income and health.

Promote Well-Being

Chenango County has high rates of poor self-reported mental health in adults, has high rates of youth disconnection, and is designated as a health provider shortage area for mental health. While increasing the number of mental health care providers would be of benefit to the county, a more immediate and effective community-based intervention would be to expand the number of people trained to identify mental health issues in their professional sphere and provide appropriate support. In particular, negative youth mental health outcomes in the county have been increasing. Early intervention could have a significant impact on the trajectory of the young people in the county and improve those outcomes.

CHN has added the evidence-based training program *Mental Health First Aid* to their programming. Since the beginning of 2019, CHN has trained 35 Chenango County residents in Adult Mental Health First Aid and has plans for training more through the *Youth Mental Health First Aid* module. This training creates more opportunities for early detection and intervention, and with the increasing negative youth mental health outcomes in the county, early intervention could have a significant impact on the trajectory of young people in the county.

Chenango County proposes to expand the *Mental Health First Aid* program by making hospital staff, health department staff, and providers available for training. In addition, efforts will be made to promote the program and organize trainings for other stakeholders and professionals from community

based organizations. A particular emphasis will be placed on training individuals who work with young people such as school staff, educators, and organizations serving youth.

Process for Distribution
The CHA/CHNA/CHIP/CSP report will be posted on the Chenango County website at: www.co.chenango.ny.us/public-health/ and on the hospital website at: WWW.NYUHS.ORG. A hard copy of the report will be made available upon request.

Process for Maintaining Partner Engagement
The Chenango County Needs Assessment Committee will continue to meet and provide oversight to the on-going efforts. The Needs Assessment Committee will also create and maintain planning committees for each of the identified priority areas. These committees, and sub-committees, will bring together community stakeholders representing various constituencies including community-based organizations, governmental entities, funders, faith communities, and employers.

The committees will be charged with activity planning, measuring progress toward goals, and reporting on each priority area.

Process Measures, Time-Framed Targets and Work Plan

Process Measures, Time Frame Targets and Work Plan

Identification of 2019 – 2021 Priorities

Priority: Promote Well-Being and Prevent Mental and Substance Use Disorders

Focus Area 1: Promote Well Being
Goal 1.2: Facilitate supportive enhancements that promote respect and dignity for people of all ages.
Objective: Increase Chenango County community scores by 7% to 44.8%.
Disparities: Lack of education of mental health issues in county, low-income, low provider area, lack of transportation and services access.

Interventions

- Mental health first aid courses made available/delivered to community and professionals
- Educate providers via detailing visits to promote Postpartum Depression (PPD) screening at infant's well child visits (1wk, 2wk, 2, 4 and 6 months) in pediatric office with referral to mother's primary health care provider (PCP)
- Educate pediatric providers in the county on the Project Teach referral and Maternal Health Mental Health project through Project Teach initiative via detailing visits to providers
- Multi-agency lobbying efforts to NYS Medicaid Transportation program to improve access and timeliness of transportation to medical appointments for county residents
- Improve awareness of local and regional services in an effort to improve outreach efforts
- Evaluate and improve outreach efforts

Family of Measures

Mental Health First Aid

- Number of courses held
- Number of individuals trained

Provider Detailing Postpartum Depression

- Number of providers educated on project
- Number of pediatric practices willing to screen moms

Project Teach Detailing

- 100% of Health Care Providers in county educated on both projects
- 100% of Health Care Providers in county receive annual updates and education
- Number of providers participating in kick off dinner/webinar
- Number of providers completing CORE training by Project Teach

Medicaid Transportation Lobbying

- Number of agencies joining letter writing campaign
- Agency self-reports improvement in Medicaid transportation for clients

Services Awareness and Improved Outreach

- Number of Chenango County calls to 211
- Agency self-reports improvement for clients

Projected (or completed) Year 1 Interventions

Mental Health First Aid

1. Organize resources
2. Coalesce partners
3. Prioritize and schedule first trainings

Provider Detailing - Postpartum Depression

1. By end of 2019, reach out and meet with 100% of Health Care Providers in county who see newborns and infants to provide education regarding Postpartum Depression screening of moms in pediatric offices
2. Educate Health Care Providers on the evidence based program

Project Teach Detailing Project

1. By end of 2019, reach out to Project Teach facilitator to discuss plan
2. Form subcommittee to plan kick off informational dinner
3. Secure funding for dinner presentation

Transportation

1. Form workgroup
2. Explore issue in depth
3. Interview partners
4. Draft advocacy letter

Access to Services

1. Form workgroup
2. Explore issue in depth
3. Collect 211 user data
4. Identify and target short comings and gaps

Projected Year 2 Interventions

Mental Health First Aid

1. Execute full slate of training courses

Provider Detailing - Postpartum Depression

1. Begin detailing visits at 2nd quarter with planned revisit by end of the year 2020 to remind and re-inforce the project details
2. Have at least one Health Care Provider successfully implement Postpartum Depression screening in their pediatric practice

Project Teach Detailing Project

1. Plan and implement informational dinner for Health Care Providers to educate them on Project Teach in first quarter of the year 2020
2. Encourage participants to sign up for Core trainings for their staff by Project Teach facilitators

3. Begin detailing visits in 2nd quarter, with planned revisit by end of the year 2020 to remind and re-inforce

Transportation
1. Introduce partners to advocacy letter
2. Edit draft as needed
3. Collect signatures
4. Send letters

Access to Service
1. Gather referrals, contacts and program information to fill gaps in 211 services

Projected Year 3 Interventions
Mental Health First Aid
1. Execute additional trainings
2. Evaluate progress and future needs

Provider Detailing - Postpartum Depression
1. Annual detailing to Health Care Providers to encourage those who are not screening to start doing so
2. Have one additional Health Care Provider agree to and implement Postpartum Depression screening in their pediatric practice

Project Teach Detailing Project
1. Visit each Health Care Provider annually to review Project Teach and encourage its use

Transportation
1. Continue conversation with partners and target program staff
2. Evaluate change and additional needs

Access to Services
1. Continue to improve program detail in 211 system
2. Encourage agency updates to the system
3. Promote system use

Implementation Partner, Role(s) and Resources

Local Health Department
Mental Health First Aid
1. Host training for staff
2. promote and refer

Provider Detailing - Postpartum Depression
1. Carry out detailing project with providers

Project Teach Detailing
1. Facilitate trainings & events
2. Funding

Medicaid Transportation Lobbying

1. Lead agency lobbying efforts

Services Awareness and Improved Outreach

Workgroup participant

1. ID resources
2. ID gaps in resource awareness
3. Culminate corrective resources and recommendations

Hospital

Mental Health First Aid

1. Host training for staff
2. Facilitate
3. Provide space
4. Promote program
5. Obtain funding

Provider Detailing - Postpartum Depression

UHS Chenango Memorial Hospital Community Health Advocate - Promote to providers

Medicaid Transportation Lobbying

Assist in finalizing letter

Services Awareness and Improved Outreach

UHS Chenango Memorial Community Health Advocate - Workgroup participant

1. ID resources
2. ID gaps in resource awareness
3. Culminate corrective resources and recommendations

Providers

Mental Health First Aid

Bassett - staff training, promote

Provider Detailing - Postpartum Depression

UHS Chenango Memorial Hospital - adopt practice change

Bassett - adopt practice change

Project Teach Detailing

UHS Chenango Memorial Hospital - promote & utilize.

Bassett - promote & utilize.

Private - promote & utilize.

Medicaid Transportation Lobbying

1. Assist in finalizing letter
2. Consider Support

Community Based Organizations

Mental Health First Aid

Chenango Health Network (CHN)

1. Facilitate
2. Provide space
3. Promote program
4. Obtain funding

Chenango County Behavioral Health

1. Staff trained as program facilitators

Project Teach Detailing

Chenango Health Network

1. Volunteer
2. Obtain funding
3. Facilitate kickoff event

Chenango County Behavioral Health

1. Support
2. Kickoff event participant

Medicaid Transportation Lobbying

Catholic Charities - lobbying efforts

Chenango County Behavioral Health - lobbying efforts

Services Awareness and Improved Outreach

Catholic Charities – workgroup participant

1. ID resources
2. ID gaps in resource awareness
3. Culminate corrective resources and recommendations

Chenango County Behavioral Health - workgroup participant

1. ID resources
2. ID gaps in resource awareness
3. Culminate corrective resources and recommendations

Other

Mental Health First Aid

First Responders – Host trainings for staff

Law Enforcement

Mental Health First Aid

Host trainings for staff

K-12 School

Mental Health First Aid

Host trainings for staff and promote

Project Teach Detailing
Unadilla Valley School Based Clinic - promote and utilize
Sherburne School Based Clinic – promote and utilize

Priority: Prevent Chronic Diseases	
Focus Area 1:	Healthy Eating and Food Security
Goal 1.2:	Increase skills and knowledge to support healthy food and beverage choices.
Objective:	Decrease the percentage of adults who consume one or more sugary drinks per day by 5%. Decrease the percent of children with obesity by 5%. Decrease the percent of adults, ages 18 years and older with obesity by 5%. Reduce dental caries.
Disparities:	Low income, geography

Interventions

Project Year 1

- "Rethink Your Drink: Drink Water" - Campaign
- Adopt beverage standards and promote message through literature and programming to reduce over consumption of sugary sweetened beverages
- Provide dental supplies to Pre K - 5th grades in all 9 community schools
- Encourage classroom dental care practice change in the schools

Project Year 2

- Expand "Rethink Your Drink: Drink Water" Campaign
- Focus on: Sugary Sweetened Beverage practice change among
  1. Schools
  2. Community - Based Partners
  3. Business
- Provide dental supplies to Pre K - 5th grades in all 9 community schools along with a dental presentation
- Encourage classroom dental care practice change in the schools

Project Year 3

- Expand "Rethink Your Drink: Drink Water" Campaign
- Focus on: Sugary Sweetened Beverage practice change for Providers
  1. Chenango Memorial Hospital Providers
  2. Bassett and Private Providers
  3. Dental Providers
- Provide dental supplies to Pre K - 5th grades in all 9 community schools
- Encourage classroom dental care practice change in the schools

Family of Measures

Project Year 1

- Number of community partners and their staff educated
- Number of providers' offices and their staff educated
- Number of households reached with door to door messaging
- Number of new families of newborns reached through mailings
- Number of community events
- Number of people reached during community events
- Phone survey (100 random calls throughout the townships) to assess number of people reached via campaign

- Number of Pre K - 5th grade classes provided with dental supplies and educational presentations in the Spring and Fall
- Number of students reached
- Number of schools that agree to adopt classroom dental care practice change for Pre K- 5th grade

Project Year 2

- Number potentially reached in 2020 with bill board messaging created on 2019
- Number of schools that agree to class room sugary sweetened beverages practice change (pledge)
- Number of community partners agreed to sugary sweetened beverages practice change for meetings and events (pledge)
- Number of businesses that agree to sugary sweetened beverages practice change for meetings and events (pledge)
- Number of Pre K - 5th grade classes provided with dental supplies and sugary sweetened beverages educational presentations
- Number of students reached
- Increase the number of schools adopting classroom dental practice change by 1
- Sugary sweetened beverages consumption among NYS adults by County Behavioral Risk Factor Surveillance System
- Prevalence of obesity among NYS adults by County Behavioral Risk Factor Surveillance System

Project Year 3

- Providers to screen and counsel patients regarding sugary sweetened beverages consumption as part of routine medical care
- Number of Chenango Memorial Hospital providers currently screening and counselling
- Number of Chenango Memorial Hospital providers that agree to practice change
- Number of Bassett and Private providers currently screening and counselling
- Number of Bassett and Private providers that agree to practice change
- Number of Dentists currently screening and counselling
- Number of Dentists that agree to practice change
- Increase the number of schools adopting classroom dental practice change by 1
- Sugary sweetened beverages consumption among NYS adults by County Behavioral Risk Factor Surveillance System
- Prevalence of obesity among NYS adults by County Behavioral Risk Factor Surveillance System

Projected (or completed) Year 1 Interventions

1. Campaign Creation (3 pronged approach - Partners, Providers and Community)
2. Campaign presentations to partners and their staff, providers and office staff, and community at large
3. Cups with Campaign messaging developed and distributed during educational opportunities (5,000+)
4. Work with the Dental Task Force to combine messaging

Projected Year 2 Interventions

1. Work with community schools to provide presentations to students, messaging in schools and sugary sweetened beverages practice change
2. Work with community partners around sugary sweetened beverages practice change
3. Work with businesses around sugary sweetened beverages practice change
4. Increase the number of schools adopting classroom dental practice change

Projected Year 3 Interventions

1. Work with providers (physicians and dentists) to screen and counsel about sugary sweetened beverages consumption as part of routine medical care
2. Increase the number of schools adopting classroom dental practice change (brushing in the classroom)

Implementation Partners, Roles(s) and Resources

Local Health Department

Sugary Sweetened Beverages

Create and facilitate sugary sweetened beverage campaign

Dental

Funding, volunteers, presentations in schools

Businesses

Sugary Sweetened Beverages

Advocate for worksite practice change

Dental

Frontier – volunteer

NBT Bank – volunteer

Blueox – volunteer

Community-based Organizations

Sugary Sweetened Beverages

Advocate for worksite practice change

Dental

Chenango United Way - formation of dental taskforce, funding, volunteer

Chenango Health Network - funding, volunteer

Norwich Rotary - funding, volunteer

Rogers Center - host events/space, volunteer

Health Insurance Plans

Dental

Fidelis – funding

Hospital

Sugary Sweetened Beverages

UHS- Chenango Memorial Hospital Community Health advocate – facilitate sugary sweetened beverages practice change among their providers

Dental

UHS Chenango Memorial Hospital - funding, volunteer

K-12 School
Sugary Sweetened Beverages
Pledge to adopt classroom practice change
Promote messaging in schools
Dental
Adopt classroom practice change
Project Year 1

- 11 schools provided with dental supplies (Zip Bags, toothbrushes, toothbrush covers and toothpaste) twice during the school year (4000 children impacted)
- 11 schools accepted the initial dental presentation (4000 children impacted)
- Unadilla Valley Central School - role model for classroom practice change
- Perry Brown - adopted classroom practice change
- Stanford Gibson - adopted classroom practice change
- Holy Family - adopted classroom practice change

Media
Sugary Sweetened Beverages
Evening Sun - run press releases
Park Outdoors - assist with billboard ads
Local Radio - assist with ads

Providers
Sugary Sweetened Beverages
Advocate for staff training, practice change around sugary sweetened beverages
Providers - screen and educate during medical visits

Other
Dental
Care Compass Network, DSRIP – donation collection

Office for the Aging
Sugary Sweetened Beverages
Advocate for messaging campaign

Priority: Prevent Chronic Diseases	
Focus Area 2:	Physical Activity
Goal 2.3:	Increase access, for people of all ages and abilities, to indoor and/or outdoor places for physical activities.
Objective:	By December 31, 2021: Decrease the percentage of adults ages 18 years and older with obesity (among all adults). Objective 1.7 – Increase the percentage of adults age 18 years and older who participate in leisure-time physical activity (among all adults).
Disparities:	Low-income, geography

Interventions
Chenango Healthy Challenge: A free resource for all community members to become engaged in physical activity, healthy eating and whole health wellness.

Family of Measures
Project Year 1
- Number of community partners and their staff involved
- Number of families involved
- Number of participants
- Number of organizational teams
- Number of surveyed participants who improved their physical activity
- Number of surveyed participants who improved their overall health

Project Year 2
- Increase number of community partners and their staff involved
- Increase number of families involved
- Increase number of participants
- Increase number of organizational teams
- Number of surveyed participants who improved their physical activity
- Number of surveyed participants who improved their overall health

Project Year 3
- Number of community partners and their staff involved
- Number of families involved
- Number of participants
- Number of organizational teams
- Number of surveyed participants who improved their physical activity
- Number of surveyed participants who improved their overall health

Projected (or completed) Year 1 Interventions
Launch the Chenango Healthy Challenge

Projected Year 2 Interventions
Increase the number of participants who participate in the challenge and complete it

Projected Year 3 Interventions
To have the support of community partners, businesses and the community at large to extend the Healthy Challenge beyond 2021

Implementation Partners, Partner Role(s) and Resources

Local Health Department
Chenango Healthy Challenge
Volunteer, promote and educate participants around Sugary Sweetened Beverages messaging

Business
Chenango Healthy Challenge
CHOBANI – donations
Willow Primitive & Boutique – facilitate classes around creative therapy for emotional and social health
Other - promote to staff

Headstart
Chenango Healthy Challenge
Volunteer

Hospital
Chenango Healthy Challenge
UHS Chenango Memorial Hospital, Community Health Advocate - volunteer, promote to hospital staff

K-12 School
Chenango Healthy Challenge
Promote to families and staff

Office of the Aging
Chenango Healthy Challenge
Promote to staff and seniors

Priority: Prevent Chronic Diseases	
Focus Area 4:	Preventive Care and Management
Goal 4.4:	Goal 4.4 In the community setting, improve self-management skills for individuals with chronic diseases, including asthma, arthritis, cardiovascular disease, diabetes and prediabetes and obesity.
Objective:	By December 31, 2021 increase the percentage of adults with chronic conditions (arthritis, asthma, CVD, diabetes, CKD,) who have taken a course or class to learn how to manage their condition by 5%. Increase in Health System Referrals by 5%. Overall decrease in A1Cs by 5% of participants that completed the programs.
Disparities:	Low-income, geography, age

Interventions

- CHN, UHS Chenango Memorial Hospital and Bassett Health Care: Chronic Disease Self-Management Program
  Expand access to evidence-based self-management interventions for individuals with chronic disease (arthritis, asthma, cardiovascular disease, diabetes, prediabetes, and obesity) whose condition(s) is not well-controlled with guidelines-based medical management alone

- Basset Health Care: National Diabetes Prevention Program
  Expand access to the National Diabetes Prevention Program (National DPP), a lifestyle change for preventing Type 2 Diabetes

Family of Measures

- Number of health systems that have policies & practices for identifying and referring patients to evidence-based self- management education (EBSMP) (Programs offered: Chronic Disease Self-Management Program (CDSMP), Diabetes Self-Management Program (DSMP), Pain Self-Management Program (PSMP)
- Number and type of evidence-based self-management education programs in community settings
- Number of patients who participate in evidence-based self-management education programs
- Percentage of patients who complete evidence-based self-management education programs
- A1C pre/post for diabetes management program
- Other pre/post for pain management program
- Number of health systems that have policies & practices for identifying and referring patients to National Diabetes Prevention Programs (NDPP)
- Number of National Diabetes Prevention Programs in community settings
- Number of patients referred to National Diabetes Prevention Programs
- Number of patients who participate in National Diabetes Prevention Programs
- Percentage of patients who complete National Diabetes Prevention Programs

Projected (or completed) Year 1 Interventions

- Offer:
  - Chronic Disease Self-Management Program (CDSMP)
  - Diabetes Self-Management Program (DSMP)
- 95% of participants registered complete the program

Projected Year 2 Interventions

- Offer:
  - Chronic Disease Self-Management Program (CDSMP)
  - Diabetes Self-Management Program (DSMP)
  - Pain Self-Management Program (PSMP)
- UHS Chenango Memorial Hospital to generate referrals via their electronic medical record

Projected Year 3 Interventions

- Offer:
  - Chronic Disease Self-Management Program (CDSMP)
  - Diabetes Self-Management Program (DSMP)
  - Pain Self-Management Program (PSMP)
- Institute the National Diabetes Prevention Program (NDPP)

Implementation Partners, Partner Role(s) and Resources

Local Health Department
Chronic Disease Self-Management
Referrals, outreach, and class promotion

Community-based Organization
Chronic Disease Self-Management

- Chenango Health Network - funding, program facilitators, space, referrals, outreach and education about classes, advertise the classes, collecting and tracking data in GSI
- Norwich Family YMCA - space, outreach and education about classes, and advertise the classes

Hospital
Chronic Disease Self-Management

- UHS Chenango Memorial Hospital - funding, program facilitators, space, referrals via providers and EMR, outreach and promotion
- Bassett – facilitate National Diabetes Prevention Program, funding, referrals, outreach and promotion.

Providers
Chronic Disease Self-Management
Promote and referral source

Other
Chronic Disease Self-Management
Care Compass Network, DSRIP – outreach and promotion

Office of the Aging
Chronic Disease Self-Management
Space, referral, outreach and promotion

Community Input

Qualitative data was gathered from a total of 51 Chenango County residents via focus groups and telephone interviews. Focus group members and telephone interviewees were recruited through social media outreach as well as from various community organizations. Five focus groups were held in locations around the county including New Berlin, Norwich, Greene, and Oxford. Forty-three residents participated in focus groups. The focus groups lasted approximately 1 hour and 15 minutes and were recorded and transcribed.

In an effort to include residents unable to attend a focus group, residents were also offered the opportunity to participate by telephone. Eight additional residents participated this way. The focus groups and interviews were conducted using a group/interview guide (beginning on page 97). Telephone interview responses were captured in real-time. Interviews lasted approximately 15 to 20 minutes. Both focus group and telephone interview participants received a $15 VISA gift card in appreciation for their involvement.

The age representation in the focus groups and telephone interviews tended to skew older than the county's population as a whole. In addition, substantially more women participated than men. This is not necessarily a barrier to considering the data valid; responses were given on behalf of the entire household.

The bulk of participants identified as White or Caucasian which is in keeping with Chenango County's population as a whole. Census data does not categorize income in the same groupings that our demographic survey does, however, it is clear that participants from low-income households were over-represented as compared to the Chenango County population. Nearly 50% of participants had a household income of less than $25,000 per year as compared with 26% of the population as a whole. While this discrepancy may impact the results somewhat, it is the low-income population that is most likely to be dealing with challenges related to social determinants of health. As such, gathering feedback from this particular group was critical for this project. Where possible, differences in responses based on income are noted throughout the report.

Table 77. Number and Percent of Participants and County Population by Age Group

Age Group	Focus groups/Interviews		Chenango County Population 20 and over
	Number	Percent	Percent
20-24	2	4%	7.5%
25-34	6	12%	13.9%
35-44	8	16%	14.2%
45-54	7	14%	19.1%
55-64	7	14%	20.2%
65-74	11	22%	14.5%
75-84	6	12%	7.6%
85+	3	6%	2.9%

Table 78. Number and Percent of Participants and County Population by Gender

Gender	Focus groups/Interviews		Chenango County Population 20 and over
	Number	Percent	Percent
Male	8	15.7%	49.9%
Female	43	84.3%	50.1%

Table 79. Number and Percent of Participants and County Population by Race and Ethnicity

Race/Ethnicity	Focus groups/Interviews		Chenango County Population
	Number	Percent	Percent
White	48	96.0%	95.0%
Hispanic/Latinx	1	2.0%	2.1%
Asian	1	2.0%	0.5%

Table 80. Number and Percent of Participants by Reported Household Income

Household Income	Focus groups/Interviews	
	Number	Percent
Under $25K	22	46.8%
$25-35K	7	14.9%
$35-45K	1	2.1%
$45-60K	6	12.8%
$60-75K	4	8.5%
$75-100K	4	8.5%
Over $100K	3	6.4%

Stakeholder Input

In addition to gathering information from county residents, 23 key stakeholders were identified and interviewed to gain further insight into the barriers and strengths of the county with respect to health and health care. Stakeholders were identified through a collaborative effort with the project's Needs Assessment Committee and represented a range of non-profit organizations, government agencies, and providers. Stakeholders were contacted with a brief explanation of the project and a request to participate in a short telephone interview. The interviews were conducted using an interview guide (see page 99) with responses captured in real-time. The interviews lasted approximately 30 minutes.

After completing the focus groups and telephone interviews, the information was analyzed by identifying, coding, and categorizing primary patterns in the data. The consistent patterns found in the analysis of the data within groups and between key informants and focus group participants supports the validity of the information gathered, but should not be assumed to be *statistically* representative of

the population as a whole. The information provided in this report should be used to identify salient issues relevant to the population and provide contextual information for the larger assessment process.

Indicator Data

Healthcare data and social determinants of health data were collected from a variety of sources including, but not limited to, the New York State Department of Health (NYSDOH), the US Census, the NYS Department of Education (NYSED), the NYS Office of Family and Children (OCFS), the Behavioral Risk Factor Surveillance Survey and resources such as the University of Wisconsin Population Health Institute, and other local needs assessment reports.

A summary of the responses to the focus group and interview questions is provided below. The most frequent responses are at the top of each list.

Table 81. Strengths of Health Care in Chenango County

Focus Group/Interview Participants	Key Informants
Hospital	Hospital
Other Providers	Collaborative Approach
Quality of Care	PCP Network
Providers	Larger Hospital System
Mental Health Clinic	Personal Attention/Small Town
Continuity Of Care	Local Organizations
School Clinics	Staff
Coordination Of Care	Patient Centered Care
Referrals	Specialties
Dental	Insurance Coverage
Emergency Services	Preventive Measures
Recreational Opportunities	Recreation Opportunities
	School-Based Health Centers
	Schools - Engagement
	Schools - Dental
	Schools - PRIDE Survey
	DSRIP
	Emergency Services
	Mental Health Clinic
	Senior Living Options
	Support Groups
	Wellness Coordinator

Table 82. Barriers to Care

Focus Group/Interview Participants	Key Informants
Lack of Providers	Transportation
Transportation	Lack of Providers
Quality of Care	Lack/Loss of Services
Access to Services/Resources	Poverty
Wait Time for Care	Funding Environment
Financial Challenges	Lack of Public Engagement/Interest
Coordination of Care	Lack of Urgent Care/Walk-In Clinic
Lack of Urgent Care/Walk-In Clinic	Provider Turnover
Lack of Responsibility for Self-Care	Underinsurance
Prescription Coverage	Comorbidity of Issues
Comorbidity of Issues	Continuity of Care
Lack of Knowledge/Information of Services	Geography
Housing	Health Literacy
Ineligibility for Services	Acuity Level
Lack of Day Care	Quality of Care
Stigma	Siloed Environment
Policy Barriers	Housing
Distance to Provider	Easy Access to Opioids
	Generational Disability
	Misuse of ER
	Lack of Day Care
	Lack of Education
	Lack of Coordinating Entity
	Stigma
	State-Level Barriers
	Wait Time for Care

Table 83. Most Pressing Issues Facing County

Focus Group/Interview Participants	Key Informants
Drugs/Substance Use	Substance Abuse
Mental Health	Mental Health
Lack of Providers	Lack of Community Engagement
Weight Issues	Dental - Medicaid
Financial Issues	Preventive Care
Transportation	Chronic Disease
Options for Wellness	Health Care Financing
Food/Healthy Food Options	Health Literacy
Health Literacy	Housing
Emergency Room Misuse	Lack of Jobs
Social Isolation	Nutrition Related Illnesses
Coordination of Care	Transportation
Lack of Services	Underinsurance
Quality of Care	Urgent Care/Emergency Room Misuse
Access to Services	Workforce Deficits
Funding for Services	Cancer
Dental Options	Hepatitis C
Communication Options	Lack of Homeless Shelter
Housing	Lack of PCPs
Smoking	Lack of Personal Care Agencies/Workers
Lack of Foster Homes	Population Decline
Provider Training Level	Potential Loss of Services
Personal Responsibility	Poverty
Cancer	Need for Priorities and Action Plan
General Poor Health	Regulations
	Root Cause Issues/SDOHs
	Tobacco
	Vision

Table 84. Suggestions for Change and Improvement

Focus Group/Interview Participants	Key Informants
More Services	More Services
Transportation	More Upstream Work/Work on SDOHs
Coordination of Care	Coordination of Care/Wraparound Services
Improve Information Availability	Strategic Planning/Visioning
More Providers	Increased Funding/Better Financial Structure
Walk-In Clinic	Restructuring of Services
Housing	Increasing Workforce
Alternative Medicine Options	Improved Communication Options
Mental Health Options	
Socialization Options	
Wellness Options	
Improve Services/Quality of Care	
School Health Centers	
Recreation	
Improved Collaboration/Planning	
Dental Services	
Drug Rehabilitation Services	
Increase Funding	

Table 85. Information Sources, Strategies for Outreach and Challenges to Communication

Focus Group/Interview Participants		Key Informants	
Current Source	**Suggestions**	**Current Strategy**	**Challenges**
Doctor	Churches	Social Media	Crisis Driven Info Search
Social Media	Social Media	Networking With Other Agencies	211
Schools	Pennysaver	Community Events	Challenges Reaching Everybody
PCP	Word Of Mouth	Direct Communication To Patients	Literacy Issues
Internet	Coordinating Organization	Radio	Misperceptions in Community
Churches	Community Events	Personal Outreach	Need For One-Stop Info Source
Phone (Internet)	Grocery Store	Outreach/Health Promotion	Struggling with Social Media
Congregate Meal	Radio	Flyers	Internal Difficulties/Approvals
County	Newspaper	Printed Media	Lack of Community Connectivity
Care Managers	Library	Front-Door Structure	
AAA	Email/Letter	Referrals From Docs/Discharge Planners	
Television	Online Meetups	Keep Putting Info Out There	
Friends	Flyers	Pennysaver	
Bulletin Boards	Doctor	Local Newspapers	
Google	Greene Facebook Page	Presentations	
Public Health	Newsletter	Networking With Agencies	
Health Insurance	Schools	Public Service Announcements	
Own Research	Nutritionist	Networking With Business	
Word Of Mouth	Byrne Dairy	Refer To 211	
Trial And Error	AAA	Word Of Mouth	
211	Coordinate With Schools	District Info	
Wellness Program At Work	Store Receipts - List Of Referrals	Bulletin Boards	
Magazines	Laundromat	Traditional Media	
Job	Letters	Ads	
	WIC	Newspaper Articles	
	Hair Salons		
	211		
	Health Fair		

Table 86. Where do you go for health care services? (Focus groups and community interviews)

Type	Where	Count
All	Broome	2
Emergency	Out Of County	5
Emergency	Binghamton	3
Emergency	Chenango	1
Primary Care	Chenango	9
Primary Care	Chenango	2
Primary Care	None	1
Primary Care	Binghamton	1
Primary Care	Broome	1
Primary Care	Out Of County	1
Specialist Care	Syracuse	5
Specialist Care	Binghamton	2
Specialist Care	Chenango	2
Specialist Care	Binghamton	2
Specialist Care	Cooperstown	1
Specialist Care	Out Of County	1
Specialist Care	Cooperstown	1
Walk-in/Urgent care	Out Of County	2

Table 87. Satisfaction with health care providers (Focus groups and community interviews)

	Choices	Quality
Less satisfied	15	7
Satisfied	2	7
Mostly satisfied	2	1
Very satisfied	0	5
Don't know	2	1

Table 88. How do you stay healthy? (Focus groups and community interviews)

Action	Count
Healthy Diet	14
Stay Active	12
Combination of Factors	10
Exercise	9
Social Activities	8
Positive Attitude	6
Medical Care	3
Other	2
Nothing	1
Vitamins	1
Sleep	1

Table 89. What would organization like to be able to provide not already providing? (Key stakeholder interviews)

Service/Action	Count
Food/Nutrition	8
Dental	4
Mental Health	4
Protective Factors	3
Better Coordination with Other Agencies	3
Substance Use	2
Child Care	2
Exercise	2
Transportation	2
Prevention/Support	2
Supportive Housing	1
Specialty Services	1
Furniture	1
Therapy Dog	1
Homelessness Services	1
Care Coordination for Individuals	1
Tick Born Disease Support	1
Financial Literacy	1
Developmental Disabilities Services	1
Telemedicine	1
Oncology	1
Dialysis	1
Client-Centered Care	1
Nothing	1

CHENANGO COUNTY COMMUNITY HEALTH ASSESSMENT
COMMUNITY INTERVIEW GUIDE

Introduction

Thank you for your willingness to participate in this interview. Your feedback is very important and will help Chenango County guide future planning and decision making. We want to know about your experiences so the county's health programs can work better for you and others in the future. *I want to remind you that your participation will be kept completely confidential. We will not release your name or any other personal identifying information at any point. All information we gather will be aggregated and quotes will be anonymized.*

What is your age? _______

Gender: Male Female Other/Prefer not to identify

Are you:

Asian
Black/African
Caucasian/White
Hispanic/Latin
Native American
Pacific Islander
Other
Prefer not to answer

What type of health insurance do you have?

Employer-based coverage
Medicare
Medicaid
Other insurance
No health insurance
Prefer not to answer

What is your household income?

Under $25,000 per year
$25,001-$35,000 per year
$35,001-$45,000 per year
$45,000-$60,000 per year
$60,001-$75,000 per year
$75,001-$100,000 per year
Over $100,000 per year
Prefer not to answer

How many people live in your household? ___________

What is your zip code?_______________________

Can you describe any health issues that you or your family are facing right now?

1. What do you do to stay healthy? What do you think are important "healthy behaviors" people should engage in?

2. Do you feel like you know when and where to seek the health care services and supports you need? Where do you typically go for routine health care services (check-ups, etc.) versus where do you or would you go for more complicated health care services for serious health care needs? (e.g. local physician/clinic, Chenango Memorial Hospital, provider/hospital in Binghamton, Syracuse, other?)

3. Are you satisfied with the care you and your family receives from your health care providers? Are you satisfied with the range of choices you have?

4. What do you think are the strengths of the health care services available in Chenango County? What is working well? What do you think Chenango County has "going for it" with regard to meeting the health care needs of the community?

5. What kinds of challenges has your family faced in accessing needed health care services? Are there any barriers that prevent your or your family, or the people you know, from getting needed care? (e.g. not knowing where to go, transportation, wait lists, services not available)

6. Are there any other challenges that stand in the way of Chenango County residents staying healthy, getting healthy, or managing ongoing health conditions? What do you think are the most serious health problems in the county?

7. Tell me about the resources that are available in Chenango County related to health care access and having a healthy lifestyle. What kinds of information or programs are there?

8. What changes do you think should be made to health care services in Chenango County? Is there an action, service, program, or resource you would like to see initiated to help make Chenango County a healthy community?

9. Where do you typically get your information about getting or staying healthy? (e.g. doctor, internet, social media, TV, 2-1-1, family) What do you think is the best way to let people in Chenango County know about current and new programs, initiatives or services?

Chenango County Community Health Assessment
Key Informant Interview Guide

1. What do you think are the strengths of the health care services available in Chenango County? What is working well? What do you think Chenango County has "going for it" with regard to meeting the health care needs of the community?

2. What kinds of challenges do Chenango County residents face in accessing needed health care services? Are there any barriers that prevent people from getting needed care? (e.g. not knowing where to go, transportation, wait lists, services not available)

3. What do you think are the most pressing issues related to health and health care in Chenango County?

4. What changes do you think should be made to health care services in Chenango County? Is there an action, service, program, or resource you would like to see initiated to help make Chenango County a healthy community?

5. How does your program typically share information about the services you provide? How do you get the information out to potential service recipients? Do you think those methods are working? What challenges do you face in getting information to potential service recipients?

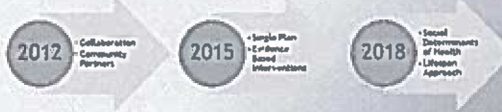
6. Are there services or programs that your organization would like to be able to provide residents, but aren't able to? What are they? Why aren't you able to?

Stakeholder Meeting
January 28, 2019

Chenango County
Community Health Assessment
& Community Health Improvement Plan
& Community Service Plan

Lisa Horn
President/Owner
HORN RESEARCH

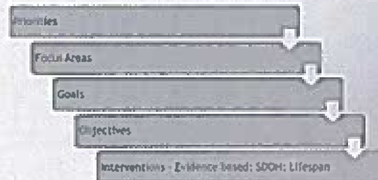
Prevention Agenda: Framework for Local Planning



Prevention Agenda: 2016-2018 Chenango Priority Area Selections

Priority	Disparity	Evidence-Based Interventions, Strategies, Activities
Prevention of Chronic Disease - Reduce Obesity in Children & Adults	Socio-economic	UHS - Stay Healthy Kids Program
Promote Healthy Women, Infants & Children - Promote Exclusive Breastfeeding	Socio-economic	Creation of Baby Nook CLC Home Visitation Breast-Feeding Coalition

Prevention Agenda 2019-2024 "NY is the Healthiest State for People of All Ages"



Prevention Agenda 2019-2024 "NY is the Healthiest State for People of All Ages"

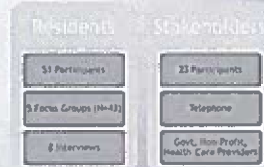
At least two initiatives from at least one of these priority areas:

- Prevent Chronic Disease
- Promote a Healthy & Safe Environment
- Promote Healthy Women, Children & Infants
- Preventing Communicable Disease
- Promote Well-Being and Prevent Mental and Substance Use Disorders

- Socio-economic
- Age
- Race
- Ethnicity
- Disability

Methodology

- Health Care Data
- Social Determinants of Health Data
- Focus Groups/Qualitative Interviews: County Residents
- Qualitative Interviews: Key Stakeholders



Barriers to Care - Top 10 Responses

[illegible]	[illegible]
Lack of Providers	Transportation
Transportation	Lack of Providers
Quality of Care	Lack of Services
Lack of Services	Poverty
Wait Time for Care	Funding Environment
Financial Challenges/Poverty	Lack of Public Engagement/Interest
Coordination of Care	Lack of Urgent Care/Walk-In Clinic
Lack of Urgent Care/Walk-In Clinic	Provider Turnover
Lack of Responsibility for Self-Care	Underinsurance
Prescription Coverage	Comorbidity of Issues
Comorbidity of Issues	Continuity of Care

Social Determinants of Health

- Income/Poverty
- Transportation
- Lack of Providers/Services

Income/Poverty

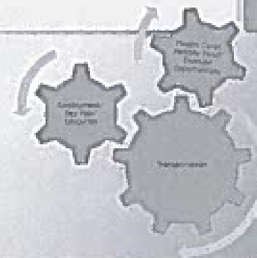
	100% of Poverty (Indiv.)	200% of Poverty (Indiv.)	ALICE (HH)
All	15.4%	36.4%	48%
Children	18.9%	43.8%	45%
Seniors	8.4%	27.9%	53%

"When you have no money, you have challenges in your life day to day ... your focus is on survival and not wellness or prevention. We can do all sorts of things to improve access ... but the bottom line challenge for this county is a deep rooted poverty scenario that factors into negative health indicators."

Transportation

Medicaid Transportation
- Health care appointments only
- Quality concerns
- Advance planning required

Non-Medicaid Transportation
- Minimal options
- Older adults
- Out of county specialty care



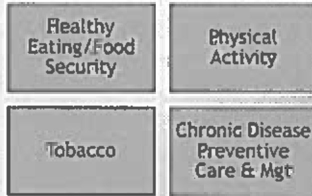
Lack of Providers/Services

Health Professional Shortage Area

Most Pressing Issues - Top 10 Responses

[illegible]	[illegible]
Substance Use	Substance Use
Mental Health	Mental Health
Lack of Providers	Lack of Community Engagement
Weight Issues/Obesity	Dental - Medicaid
Financial Issues/Poverty	Preventive Care
Transportation	Chronic Disease
Options for Wellness/Prevention	Health Care Financing
Food/Healthy Food Options	Health Literacy
Health Literacy	Housing
Emergency Room Misuse	Lack of Jobs

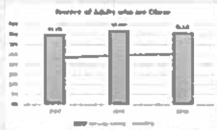
Prevent Chronic Diseases



Prevent Chronic Diseases

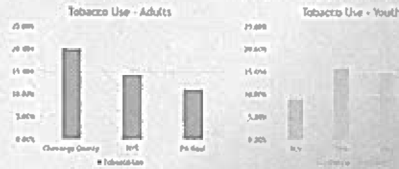
	Health care cost/ [illegible]	People affected	Trend	NYS Goal	Pressing Issue
Diet & Exercise Related Illnesses (cardiovascular, stroke, diabetes)	$$$	###	→	👎	Y
Tobacco Related Illnesses (asthma, lung cancer, COPD)	$$$	##	→	👎	N
Illnesses Requiring Screening, Detection & Management (cancer, hypertension, diabetes, asthma)	$$$	##	→	👎	Y

Prevent Chronic Diseases: Key Statistics



- Higher rates of sugary drink consumption
- Lower rates of fruit and vegetable consumption

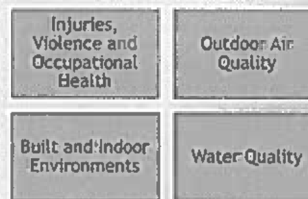
Prevent Chronic Diseases: Key Statistics



Prevent Chronic Diseases: Key Statistics

- Lower rates of cancer screenings
- Lower rates of check-ups & well visits
- Higher rates of diabetes hospitalization

Promote a Healthy and Safe Environment



Promote a Healthy and Safe Environment

	Health care cost/ [illegible]	People affected	Trend	NYS Goal	Pressing Issue
Injuries, violence and occupational health	$	##	→	👍	N
Healthy homes and schools (lead screening)	$	##	?	👎	N

Promote a Healthy and Safe Environment: Key Statistics

- 67.5% children 9-17 months tested for lead
- 57.7% children 18-35 months tested for lead
- PA Goal = 95% of children aged 1 and 2

Promote Healthy Women, Children and Infants

Promote Healthy Women, Children and Infants

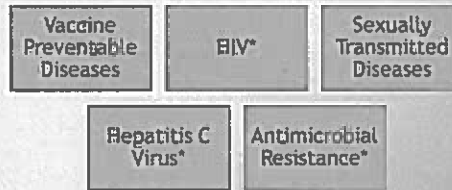
	Health care cost/person	People affected	Trend	NYS Goal	Pressing Issue
Child/Adolescent Social & Emotional Health	?	##	?	?	Y
Dental Caries	$	##	↗	👎	Y

Promote Healthy Women, Children and Infants: Key Statistics

Grade	Never take part in community activities	Never take part in school activities
6th	[illegible]	[illegible]
7th	[illegible]	[illegible]
8th	[illegible]	[illegible]
9th	[illegible]	[illegible]
10th	[illegible]	[illegible]
11th	[illegible]	[illegible]
12th	[illegible]	[illegible]

- 57% of 3rd graders have caries experience
- 39.2% kids with Medicaid had dental visit in past year
- Caries rate is nearly double NYS rate

Prevent Communicable Diseases



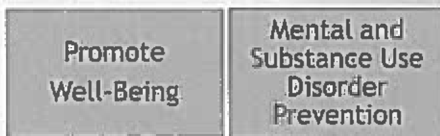
Prevent Communicable Diseases

	Health care cost/person	People affected	Trend	NYS Goal	Pressing Issue
Influenza and Pneumonia Vaccinations	$	#	↘	?	N
Sexually Transmitted Infections	$	##	↘	?	N

Prevent Communicable Diseases: Key Statistics

- Declining rates of flu vaccinations
- Hospitalization rates for flu/pneumonia higher than NYS

Promote Well-Being and Prevent Mental and Substance Use Disorders



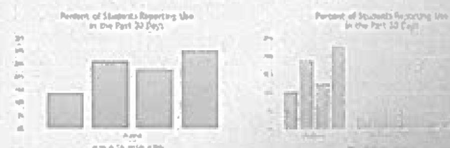
Promote Well-Being and Prevent Mental and Substance Use Disorders

	Health care cost/person	People affected	Trend	NYS Goal	Pressing Issue
Poor Mental Health	$	###	↗	?	Y
Substance Use	$$	#	?	👎	Y
Adverse Childhood Experiences	?	#	→	👎	N

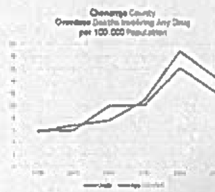
Promote Well-Being and Prevent Mental and Substance Use Disorders: Key Statistics

- 13% adults report 14 or more poor mental health days in last month (10.6% NYS)
- 17% Chenango Co youth are "disconnected"
- Chenango County is a health professional shortage area (HPSA) for mental health and the Medicaid population in the county has been designated as a Medically Underserved Population with respect to mental health.

Promote Well-Being and Prevent Mental and Substance Use Disorders: Key Statistics



Promote Well-Being and Prevent Mental and Substance Use Disorders: Key Statistics



Newborn Drug Related Diagnosis Rate per 10,000 Newborn Discharges

Year	Chenango County 3-Year Average	NYS exc. NYC
2005		56.6
2006	43.5*	60.9
2007	49.4*	64.7
2008	122.5	72.0
2009	179.5	76.3
2010	185.9	88.7
2011	161.5	106.4
2012	166.7	117.4
2013	198.7	140.5
2014		156.4

Promote Well-Being and Prevent Mental and Substance Use Disorders: Key Statistics

- In 2016, 380 Chenango County children were identified as victims of one or more substantiated allegation through Child Protective Services (CPS).
- Chenango County's rate of 35.04 per 1,000 children was more than double the state-wide rate of 14.51 and well above the 2024 Prevention Agenda goal of 10 per 1,000.

What's Next?

- LUNCH!
- STICKERS!
- DISCUSSION!

Sticker Activity

- Around the room are 5 posters with the Priority Areas and Focus Areas
- 5 Green Stickers: Use these stickers to VOTE on which focus area(s) you think should be selected. Disperse them as you wish. All 5 on one focus area, or split them up
- 1 Red "Whammy" Sticker: Used to indicate which focus area you think definitely should NOT be selected

Additional Questions to Keep in Mind

- Work time lost or disability
- Health disparities present
- Measurability/ability to monitor change
- Opportunity to continue prior intervention focus
- Feasibility for potential intervention
- Availability for funding for intervention

NYS DOH requires county health departments/community hospitals to choose TWO focus areas and ONE health disparity associated with that focus area. The focus areas selected can be within one priority area or two priority areas. (e.g. healthy eating and food security and preventive care and management (Prevent Chronic Disease) OR healthy eating and food security (Prevent Chronic Disease) and child and adolescent health (Healthy Women, Infants and Children)

Priority/Focus Area	Goal	Objectives	Intervention	Partnerships /Collaborations	Health Disparity	Short-Term Measures	Long-Term Measures
Prevent Chronic Disease							
Healthy Eating and Food Security	Increase skills and knowledge to support healthy food and beverage choices	• Decrease childhood obesity by 5% • Decrease adult obesity by 5% • Decrease % of adults consuming one or more sugary drinks per day by 5%; 10% low-income Additional outcome: Reduced dental caries	Chenango County Public Health: Rethink Your Drink[140]	*Adopt beverage standards & promote message through literature and programming* • CBOs – (CCE, CC, YMCA, BB/BS, OFC) • CMH • Employers Wellness Programs • Schools/HeadStart • PCPs • Faith community • Dental Task Force • Other County Offices (AAA, DSS, MH, YB) *Provide water bottles to at-risk populations (kids, others?)* • Funders/UW	Low-income	• Number of people served by or exposed to programming • Pre-/Post-knowledge tests at programming • Number of organizations with beverage standards/policies	**Baseline:** available (Student Weight Status, BRFSS) **Updated data:** available (Student Weight Status, BRFSS)

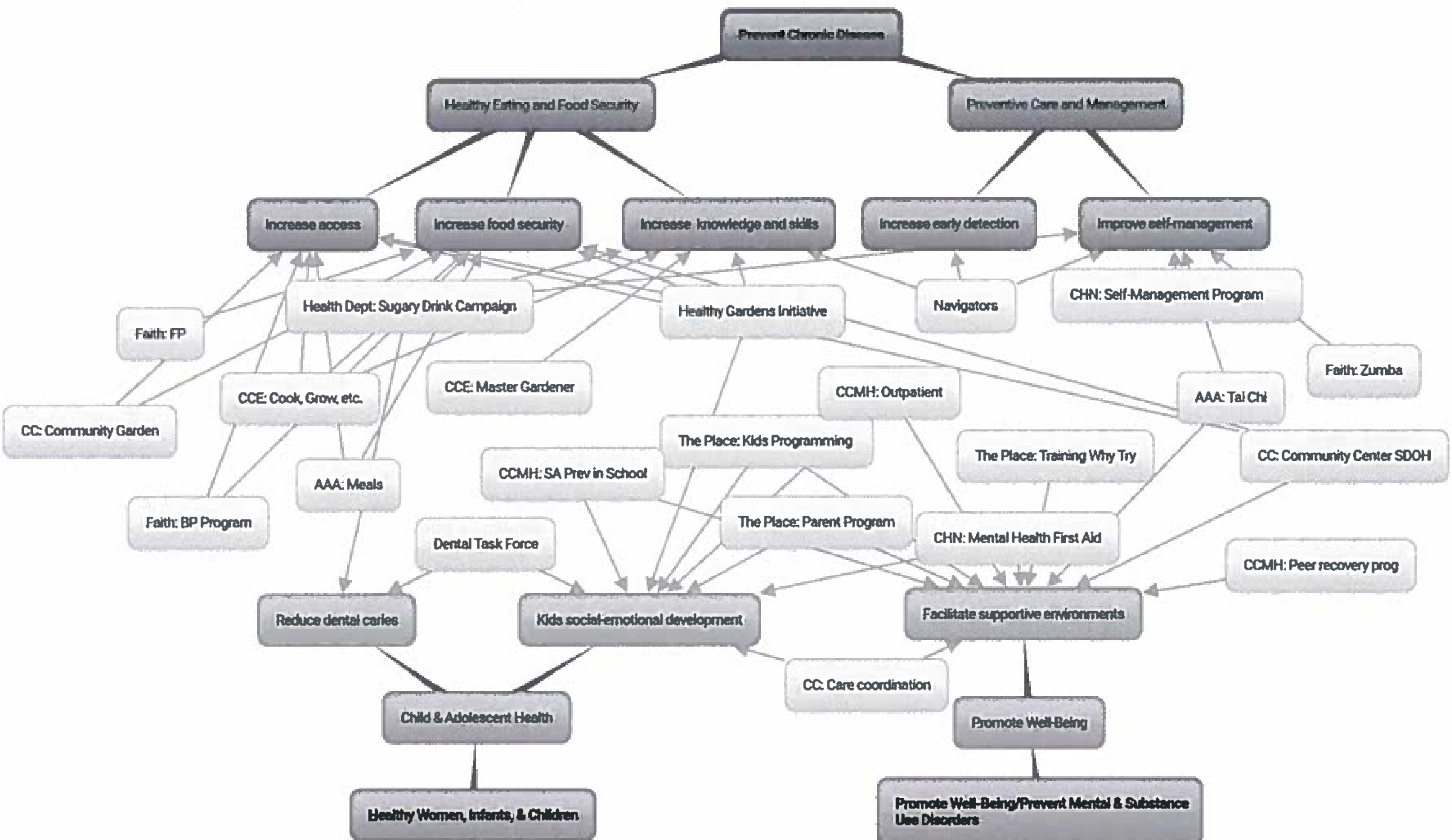
[140] https://www.cardiosmart.org/News-and-Events/2017/03/Public-Health-Campaign-Helps-Decrease-Sales-of-Sugary-Beverages

Priority/Focus Area	Goal	Objectives	Intervention	Partnerships /Collaborations	Health Disparity	Short-Term Measures	Long-Term Measures
Prevent Chronic Disease							
Preventive Care and Management	Improve self-management skills for individuals with chronic conditions	• Increase % of adults with chronic conditions who have taken course to manage condition by 5%	Chenango Health Network: Chronic Disease Self-Management Program[141]	*Referrals to program and dissemination of literature* • CMH (discharge planning) • PCP • Schools (Welcome to school packet) • CBOs (CCE, CC, YMCA, OFC) • Other County Offices (DSS, MH, YB, AAA: (Possibly provide training at other programs? E.g. congregate meals) • CCPH Nursing *Provide transportation/child-care for programs* • RHNCNY/OFC *Provide incentives for participation* • Funders/UW	Low-income Age Geography (distance to hospital)	• Number of people successfully completing self-management program • A1a pre-/post for diabetes program • Other pre-/post for pain program	**Baseline:** available (BRFSS) **Updated data:** available (BRFSS)

[141] https://www.ncbi.nlm.nih.gov/pubmed/24113813

Priority/Focus Area	Goal	Objectives	Intervention	Partnerships /Collaborations	Health Disparity	Short-Term Measures	Long-Term Measures
Promote Well-Being and Prevent Mental and Substance Use Disorders							
Promote Well-Being	Facilitate supportive environments that promote respect and dignity for people of all ages.	From Opportunity Index, increase: • Economy Scores by 7% to 57.9%. • Education Scores by 7% to 53.7%. • Community Scores by 7% to 41.8%. • Health Scores by 7% to 65.6%. Additional objectives: • Increase % of kids with mental/emotional condition who receive treatment/counseling by 10%; • Decrease suicide mortality rate for youth 15-19 by 6%	Chenango Health Network: Mental Health First Aid[142]	*Make staff/volunteers available to trainings* • Schools • CMH/PCP • County government staff (AAA, CCPH) • CBOs (CCE, CC, YMCA, BB/BS, OFC) *Provide incentives for participation* • Funders/UW	Age (kids – suicide/self-injury rates are up) Low-income	• Number of adults trained in mental health first aid/trauma-informed care • Number of pro-social community events/activities • Number of children participating in pro-social programs/activities	**Baseline:** available on Opportunity Index site **Updated data:** available on Opportunity Index site **Baseline:** DSRIP data; (low incidence of suicide – Community Health Assessment Indicators - delay) **Updated data:** DSRIP data

[142] https://www.mentalhealthfirstaid.org/cs/wp-content/uploads/2013/10/MHFA-Research-Summary-UPDATED.pdf


Prevent Chronic Disease
Healthy Eating and Food Security
Preventive Care and Management
Increase access
Increase food security
Increase knowledge and skills
Increase early detection
Improve self-management
Health Dept: Sugary Drink Campaign
Healthy Gardens Initiative
Navigators
CHN: Self-Management Program
Faith: FP
CC: Community Garden
CCE: Cook, Grow, etc.
CCE: Master Gardener
CCMH: Outpatient
AAA: Tai Chi
Faith: Zumba
The Place: Kids Programming
The Place: Training Why Try
CC: Community Center SDOH
AAA: Meals
CCMH: SA Prev in School
Faith: BP Program
The Place: Parent Program
CHN: Mental Health First Aid
Dental Task Force
CCMH: Peer recovery prog
Reduce dental caries
Kids social-emotional development
Facilitate supportive environments
CC: Care coordination
Child & Adolescent Health
Promote Well-Being
Healthy Women, Infants, & Children
Promote Well-Being/Prevent Mental & Substance Use Disorders

The Estimated Costs of Potentially Preventable Chronic Disease in Chenango County

In an effort to assess the potential cost savings that could be obtained through behavioral health changes by community members, Horn Research reviewed data and prior research on the costs, preventability, and incidence of seven prevalent chronic diseases: heart disease, stroke, hypertension, lung cancer, COPD, diabetes and colon cancer.

Research suggests that higher medical costs in the United States are associated with modifiable risk factors. A study in 2012 found that depression, high blood glucose, high blood pressure, tobacco use, physical inactivity, and high stress all resulted in increased annual medical spending.[143] Research has also made clear that many of the most prevalent and deadly health conditions are caused by these risk factors and are preventable. For example, the CDC estimates that 80% of premature heart disease and strokes are preventable through the elimination of tobacco, increasing physical activity, and improving diet.[144] A study in 2001 suggested that the vast majority of Type 2 diabetes cases could be prevented through weight reduction, exercise, improved diet, and eliminating smoking.[145] A study from 2017 estimated that 42% of invasive cancer cases and deaths (excluding non-melanoma skin cancers) in adults aged 30 years and older in the United States in 2014 "were attributable to major, potentially modifiable exposures such as cigarette smoking; secondhand smoke; excess body weight; alcohol intake; consumption of red and processed meat; low consumption of fruits/vegetables, dietary fiber, and dietary calcium; physical inactivity; ultraviolet radiation; and 6 cancer-associated infections."[146]

Chenango County has high incidences of cancer, cardiovascular diseases, and respiratory diseases as well as high rates of the risk factors associated with them including obesity, tobacco use and poor mental health.

- Between 2013 and 2015, Chenango County had the highest mortality rate from cardiovascular disease in the state, nearly double the NYS rate.
- Cardiovascular disease hospitalization rates in Chenango County are 12% higher than NYS and have remained mainly flat over several years.
- Chenango County's cancer incidence rate in 2012-2014 for all cancers was 28% higher than NYS as a whole.
- Chenango County has higher rates of diabetes and high blood pressure than NYS.
- Over one third of adults (35.6%) and 21.2% of children and adolescents in Chenango County are obese.
- One in five Chenango County adults smoke as compared to 14% of NYS adults.
- Chenango County has higher rates of adults reporting poor mental health than NYS as a whole.

[143] Ron Z. Goetzel, Xiaofei Pei, Maryam Tabrizi, Rachel Henke, Ten Modifiable Health Risk Factors are Linked to More than One-Fifth of Employer-Employee Health Care Spending. *Health Affairs*, November 2012.
[144] CDC, https://www.cdc.gov/vitalsigns/million-hearts/ retrieved December 24, 2018
[145] *Hu FB, Manson JE, Stampfer MJ, et al. Diet, lifestyle, and the risk of type 2 diabetes mellitus in women. N Engl J Med. 2001; 345:790-7.*
[146] Farhad Islami, et. al., Proportion and Number of Cancer Cases and Deaths Attributable to Potentially Modifiable Risk Factors in the United States. *CA: A Cancer Journal for Clinicians*, November 2017.

Hospital Discharge Data

Inpatient discharge data from Chenango Memorial Hospital (CMH) provides a view into the cost of potentially preventable diseases in the county.[147] The following chart shows that the average yearly total charges for specific illnesses for adults aged 18-49 and 50-69 who were discharged from CMH between 2011 and 2016. In addition, the estimated percentage of illnesses that could be prevented through behavioral changes such as increasing physical activity, dietary changes, taking medication as ordered, and quitting smoking have been identified through an extensive literature review. These estimates have been used to calculate the potential cost savings of $1.4 million per year that may be achieved through behavioral modification.

Table 90. Inpatient Cost Data by Age Group and Estimated Preventable Cost Savings

	Aged 18-49	Aged 50-69	Aged 18-69	Percent of Disease that is Preventable	Estimated Preventable Hospital Cost per Year
Heart Disease[148]	$41,258	$357,302	$398,560.00	80%[149]	$318,848
Stroke	$5,957	$74,849	$80,806.00	80%[150]	$64,645
Hypertension	$2,524	$22,622	$25,146.00	100%[151]	$25,146
Lung cancer	$0	$17,292	$17,292.00	85.8%[152]	$14,837
COPD	$109,519	$757,663	$867,182.00	85%[153]	$737,105
Diabetes	$117,264	$111,405	$228,669.00	90%[154]	$217,235
Colon cancer	$13,673	$13,194	$26,867.00	54.6%[155]	$14,669
	$290,195	$1,354,327	$1,644,522		$1,392,485

Limitation: It is important to note that these costs are specific to care received at CMH and are only a small portion of the total costs associated with potentially preventable chronic disease in the county. Many Chenango County residents receive care from other providers including outpatient care, primary and specialist care and require other types of intervention such as medication and home health care.

In addition, many Chenango County residents receive health care services out of county. DSRIP data show that out of the 535,116 claims from Chenango County Medicaid recipients,[156] only 209,391 (39.1%) of them were received in Chenango County.

[147] SPARCS Hospital Inpatient Discharges, 2011, 2012, 2013, 2014, 2015, & 2016, NY Open Data
[148] Includes Heart attack, Angina, Coronary Atherosclerosis, Heart Failure
[149] CDC, https://www.cdc.gov/vitalsigns/million-hearts/
[150] CDC, https://www.cdc.gov/vitalsigns/million-hearts/
[151] While the cause of hypertension is unknown for 90-95% of cases, high blood pressure is easily identifiable and highly treatable through a combination of diet, exercise and medication. The availability of several options for treatment suggests that up to 100% of hypertension could be adequately controlled.
[152] Farhad Islami, et. al., Proportion and Number of Cancer Cases and Deaths Attributable to Potentially Modifiable Risk Factors in the United States. *CA: A Cancer Journal for Clinicians*, November 2017.
[153] American Lung Association, https://www.lung.org/lung-health-and-diseases/lung-disease-lookup/copd/symptoms-causes-risk-factors/preventing-copd.html
[154] *Hu FB, Manson JE, Stampfer MJ, et al. Diet, lifestyle, and the risk of type 2 diabetes mellitus in women. N Engl J Med. 2001; 345:790-7.*
[155] Farhad Islami, et. al., Proportion and Number of Cancer Cases and Deaths Attributable to Potentially Modifiable Risk Factors in the United States. *CA: A Cancer Journal for Clinicians*, November 2017.
[156] Includes clinic, ER, home health, inpatient, laboratory, practitioner, referred ambulatory, and other professional services

Table 91. Inpatient Costs as a Percent of Total Costs

	Percent of Overall Costs that are Inpatient/ER[157]
Heart Disease[158]	59.3%
Stroke	63%
Hypertension	18.9%
Lung cancer	27.7%
COPD	39%
Diabetes	24.1%
Colon cancer	27.7%

National Estimates

Another option for determining the healthcare costs of potentially preventable chronic disease is to analyze local data within the context of national cost estimates. A single source detailing the medical costs per person per year for preventable chronic diseases is not available. However, various health and economics researchers and organizations have developed estimates of cost per person. Using these estimates and data from the NYS Department of Health on incidence and hospitalization rates in Chenango County, the total healthcare dollars that could potentially be saved through preventive measures have been projected. The cost per person estimates are the cost of health care (including inpatient, outpatient, medication, and other health care costs) for persons with the disease above and beyond the health care costs for persons without the disease.

For example, the number of people in Chenango County hospitalized with coronary heart disease serves as a proxy for the number of people with heart disease (N=180). Multiplying this number by the percentage of premature deaths from diseases of the heart (30%) results in an estimated number of people suffering from premature heart disease (Column A.) The CDC estimates that 80% of premature heart disease is preventable through modifiable factors (Column B.) The Kaiser Family Foundation analysis of the Medical Expenditure Panel Survey estimated that the health care spending in 2013 for persons ever diagnosed with heart disease is $12,796 and the health care spending for persons never diagnosed with heart disease is $4,201. The difference, $8,595, is considered the cost per person per year (Column C.) Column A, Column B and Column C are multiplied to determine the total estimated healthcare costs per year for all people with premature heart disease, $1,388,952, (Column D.)

Limitation: A word of caution with respect to the Potential Cost Savings estimate: the cost per person per year may reflect increased costs due to comorbidity of other diseases. For example, a person may have both diabetes and heart disease. Therefore, health care costs for heart disease may include the increased cost for diabetes care (or other comorbid diseases) and as such, the Potential Cost Savings should not be totaled across diseases. Nevertheless, it is clear that the healthcare costs for Chenango County residents may be significantly reduced through modified behaviors such as weight loss, improved diet, increased physical exercise, and quitting smoking.

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[157] Medical Expenditure Panel Survey,
https://meps.ahrq.gov/data_stats/tables_compendia_hh_interactive.jsp?_SERVICE=MEPSSocket0&_PROGRAM=MEPSPGM.TC.SAS&File=HCFY2014&Table=HCFY2014%5FCNDXP%5FC&_Debug=

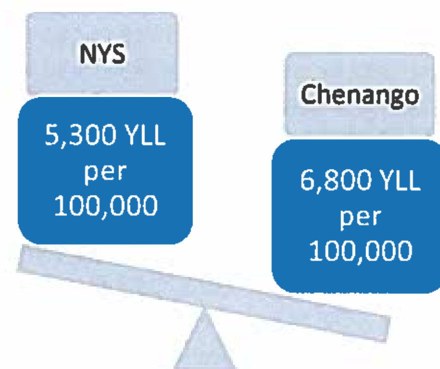
[158] Includes Heart attack, Angina, Coronary Atherosclerosis, Heart Failure

Table 92. Potentially Preventable Disease Health Care Costs and Estimated Cost Savings

Disease	Column A: People in County with Disease (3 yr avg.)[159]	Column B: Percent of Disease Occurrence that is Preventable	Column C: Estimated Health Care Cost per Person per Year	Column D: Estimated Health Care Costs – County per Year
Heart disease	202[160]	80%	$8,595[161]	$1,388,952
Stroke	26[162]	80%	$12,221[163]	$254,197
Hypertension	14,423[164]	100%	$363[165]	$5,235,549
Lung cancer	37	85.8%	$21,495[166]	$682,380
COPD	151	85%	$10,001[167]	$1,283,628
Diabetes	4,454[168]	90%	$7,732[169]	$30,994,495
Colon cancer	26	54.6%	$29,196[170]	$414,466

Years of Life Lost

Beyond healthcare cost estimates, preventable chronic disease frequently results in premature death.[171] Calculating the potential Years of Life Lost (YLL) as a result of premature death offers an opportunity to examine other costs which may be related to chronic disease and the risk factors associated with them.



According to the University of Wisconsin Population Health Institute County Health Rankings, Chenango County's average YLL (2014-2016) is nearly 30% higher than the NYS rate. In 2016, Chenango County premature deaths represented nearly 3,000 years of life lost.

[159] County Health Assessment Indicators, NYS DOH & NYS eBRFSS
[160] Percent of premature death from cardiovascular disease (30%) x estimated number of people hospitalized for cardiovascular disease.
[161] Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, https://www.healthsystemtracker.org/chart-collection/know-cardiovascular-disease-spending-outcomes-united-states/#item-spending-by-diagnosis
[162] Percent of premature death from stroke (24%) x estimated number of people hospitalized for stroke.
[163] Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, https://www.healthsystemtracker.org/chart-collection/know-cardiovascular-disease-spending-outcomes-united-states/#item-spending-by-diagnosis
[164] 38% of Chenango County adults have been diagnosed with high blood pressures
[165] Elizabeth Kirkland, et. al., Trends in Healthcare Expenditures Among US Adults with Hypertension: National Estimates, 2003-2014, *Journal of American Heart Association*, May 2018. The study found a difference of $1,920 per year between hypertensive and non-hypertensive people. The bulk of these costs ($1,557) is prescription costs. Prescription costs are not included in our estimate.
[166] Lucie Kutikova, Lee Bowman, Stella Chang, Stacey R. Long, Coleman Obasaju, William H. Crown, The economic burden of lung cancer and the associated costs of treatment failure in the United States, *Lung Cancer Journal*, November 2005
[167] Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, https://www.healthsystemtracker.org/chart-collection/know-cardiovascular-disease-spending-outcomes-united-states/#item-spending-by-diagnosis
[168] 12.3% of Chenango County adults have been diagnosed with diabetes, 95% of diabetes is Type 2.
[169] Kaiser Family Foundation analysis of Medical Expenditure Panel Survey, https://www.healthsystemtracker.org/chart-collection/know-cardiovascular-disease-spending-outcomes-united-states/#item-spending-by-diagnosis The difference in health care costs for people with diabetes and without diabetes is $9,097, but this includes the cost of diabetes medications and supplies. Because most people with Type 2 diabetes will likely need to continue medication even with behavior changes, these costs have been subtracted from the cost per person. The American Diabetes Association estimates that 15% of diabetes health care costs are for anti-diabetic medication and supplies.
[170] Zhehui Luo, Ph.D., Cathy J. Bradley, Ph.D, Bassam A. Dahman, and Joseph C. Gardiner, Ph.D.Colon Cancer Treatment Costs for Medicare and Dually Eligible Beneficiaries. Health Care Financ Rev. 2009 Fall; 31(1): 35–50.
[171] Death before 75 years of age

Table 93. 2016 Deaths by Age Category and Years of Life Lost in Chenango County

Age category	Number of deaths[172]	Mean age at death	Average Years of Life Lost (75-Mean Age at Death)	Total YLL
20-24	10	22	53	530
5-34	6	29.5	45.5	273
35-44	6	39.5	35.5	213
45-54	36	49.5	25.5	918
55-64	64	59.5	15.5	992
	122			2,926

Limitation: Premature mortality is not necessarily caused by chronic disease or unhealthy behaviors. Premature death may be a result of many other factors including accidents or genetic causes. Despite this limitation, YLL is an important indicator of poor health in a community.

Earnings Loss

The loss of earning power due to premature death is a significant loss to families and the county economy and workforce. The median earnings for workers in Chenango County in 2016 was $29,095 per year.[173] While not all of these deaths were caused by chronic disease or were preventable, it is likely that some portion were. According to a study in 2014, approximately two-thirds of all US deaths are a result of potentially preventable chronic disease and approximately 20-40% of those deaths are preventable.[174] An estimate of earnings lost based on these approximations would suggest that over $600,000 in earnings were lost due to the premature deaths of Chenango County residents aged 25-64 in 2016. Assuming the median income increases by 2% each year, over $16 million in earnings would be lost over a normal life span for these 21.1 potentially preventable deaths.

Table 94. Estimated Earnings Lost due to Potentially Preventable Deaths

Age category	Number of potentially preventable deaths[175]	Mean age at death	Average Years of Life Lost (75-Mean Age at Death)	Total YLL	Earnings Lost per Year	Total Earnings Lost per Life Lost
25-34	1.1	29.5	45.5	50.1	$32,005	$2,300,890
35-44	1.1	39.5	35.5	39.1	$32,005	$1,600,048
45-54	6.8	49.5	25.5	173.4	$197,846	$6,337,067
55-64	12.1	59.5	15.5	186	$352,050	$6,088,139
Total	21.1			448.6	$613,906	$16,326,144

Limitation: The calculation of the number of potentially preventable deaths, and thus the total lost earnings, is clearly an inexact estimate. A more precise calculation would require significantly more information about cause of death and the risk behaviors of the deceased. While the calculation is very approximate, it does give a sense of the potential earnings lost that families face due to preventable chronic disease.

[172] NYS Vital Statistics, Deaths by Age and Resident County, 2016

[173] Table DP03. Selected economic characteristics, American Community Survey 5-Year estimates, 2012-2016

[174] CDC, https://www.cdc.gov/media/releases/2014/p0501-preventable-deaths.html

[175] Number of deaths by age group multiplied by .63 (estimate of percent due to chronic disease) and by .3 (estimate of potentially preventable deaths)

UHS Chenango Memorial Hospital Resolution of Approval

UHS CHENANGO MEMORIAL HOSPITAL

BOARD RESOLUTION

WHEREAS, the Board of Directors at their regular meeting on December 9, 2019 reviewed and approved the 2019-2021 Community Health Needs Assessment as well as the 2019-2021 Community Service and Implementation Plan completed in collaboration with the Chenango County Department of Health.

BE IT RESOLVED, that the Board of Directors of the Hospital hereby approves said documents as submitted.

Steven J. Palmatier
Secretary, Board of Directors
UHS Chenango Memorial Hospital