



2021

SWAIN

COMMUNITY HOSPITAL

A Duke LifePoint Hospital

Community Health Needs Assessment (CHNA)

Board Approved:

Available:





This document is a hospital facility-specific Community Health Needs Assessment (CHNA) Executive Summary. For more process and data details on counties within our defined community, specific health data, and the collaborative community health assessments see:

- **Link:**

The Swain County Health Department in collaboration with the Community Wellness Action Team, WNC Healthy Impact, and Swain Community Hospital produced and sponsored community health needs assessment (CHNA) in 2021.

Community Health Assessment Process Leadership & Partnerships

In Swain County, leadership for the Community Health Assessment (CHA) process can be described as traditional, with the Swain County Health Department (SCHD) as the responsible party. SCHD collaborated closely with Swain Community Hospital's Wellness Manager and Community Health Needs Assessment (CHNA) Facilitator.

Regional Services

Our county received support from **WNC Healthy Impact**, a partnership and coordinated process between hospitals, public health agencies, and key regional partners in western North Carolina working towards a vision of improved community health. We work together locally and regionally to assess health needs, develop collaborative plans, act, and evaluate progress and impact. This innovative regional effort is coordinated and supported by **WNC Health Network**. WNC Health Network is the alliance of hospitals working together to improve health and healthcare in western North Carolina. Learn more at www.WNCHN.org.

Theoretical Framework/Model

WNC Health Network provides local hospitals and public health agencies with tools and support to collect, visualize, and respond to complex community health data through Results-Based Accountability™ (RBA). RBA is a disciplined, common-sense approach to thinking and acting with a focus on how people, agencies, and communities are better off for our efforts.

Through WNC Healthy Impact, all hospitals and their public health partners can access tailored Results-Based Accountability training and coaching, scorecard licenses, and development

Collaborative Process Summary

Swain County's collaborative process is supported by WNC Healthy Impact, which works at the regional level. Locally, our process is supported by the Community Wellness Action Team (C-WAT) and the local hospital CHNA Facilitator. Phase 1 of the collaborative process began in January 2021 with the collection of community health data. For more details on this process see Chapter 1 – Community Health Assessment Process.

Key Findings

Primary data revealed less than 4% of residents in Swain County consumed five or more servings of fruits or vegetables daily, and less than a quarter (22%) of the population was meeting the physical activity recommendations of 150 active minutes per week (WNCHN – WNC Healthy Impact Community Health Survey, 2021). Furthermore, 80% of residents were overweight or obese, which was an increase from 2018 (76%). While the percentage of residents identified as overweight or obese increased, those identified as obese have remained the same at 49%. Approximately, 22% of respondents have been diagnosed with Diabetes in 2021, which was a minimal decrease from 2018 (23%). While there was a slight decline from 2018 to 2021, Swain County's Diabetes rate is the highest in the region. Inversely, the rate of heart disease diagnosis significantly declined from 2018 to 2021, decreasing by roughly 6% in three years. Similarly, to heart disease, the rate of COPD diagnosis decreased dramatically from 2018, declining from 22% to 13%.

Substance misuse increased during the pandemic. Roughly 55% of Swain County residents indicated that their lives had been negatively impacted by substance misuse in 2021 (WNC Health Network, 2021). While lives were negatively affected, those who used opioids with or without a prescription decreased by approximately 7% from 2018 to 2021. The use of cigarettes decreased from 2018, with 18% identifying as current smokers compared to 23% in 2018. Similarly, the use of vaping products and smokeless tobacco also decreased. Furthermore, those who identified as excessive drinkers increased by 1% from 2018 to 2021.

Compelling evidence prompted the behavioral health priority; 70% of residents shared that the "always/usually" get needed social or emotional support, which was close to a 4% decrease from 2018. Further, approximately 9% of respondents reported having considered suicide in the past year, which was greater than the regional average. When asked about obtaining mental health services in the past year, 21% of respondents reported that they were unable to obtain needed help, which was above the national average.

These and additional findings stood out to participants assisting with prioritization and ultimately lead to the choosing of the current health priorities.

Health Priorities

Through the Community Health Assessment process, the three priority areas chosen were Chronic Disease as it relates to obesity with Swain County community members, Substance misuse prevention and reducing substance abuse in our community, and COVID-19 prevention.

Next Steps

In early 2022, C-WAT will work towards better understanding the story and root causes behind our priority issues, as well as engage with existing and new partners to help improve these issues. C-WAT will help identify evidence-based strategies and develop a Community Health Improvement Plan (CHIP). Action Teams will also be identified to support improvement efforts.

Health Priorities

The following are the finalized health priorities for Swain County, selected by the community:

- **Health Priority 1 - Chronic Disease as it relates to obesity with Swain County community members**
- **Health Priority 2 – Substance use prevention and reducing substance abuse in our community**
- **Health Priority 3 – COVID-19 Pandemic**

The CHNA report was developed by Swain Community Hospital in partnership with the Swain County Health Department as part of a local community health needs assessment process. For a more detailed acknowledgment of all the partners involved in the creation of this assessment please see “Community Input and Engagement” on page 19.

Our community health needs assessment process and products were supported collaboratively by **WNC Healthy Impact**, a partnership between hospitals and health departments to improve community health in western North Carolina. This innovative regional effort is coordinated, housed and financially supported by **WNC Health Network**, the alliance of western NC hospitals working together to improve health and healthcare. Learn more at www.WNCHN.org.



WNC**HEALTHY**IMPACT



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CHAPTER 1 -- EVALUATION OF ACTIONS TAKEN SINCE PREVIOUS (2018) CHNA

Making a difference on population-level health priorities requires an array of initiatives across the community, and involves the collective participation of the programs, agencies, and service systems striving to address these priority health issues. As part of a collaborative response to addressing health needs in our community, our hospital facility is an important contributor to meaningful progress on these health priorities.

The summary below provides an overview of the progress and impact of actions taken since our last CHNA that was conducted in 2018.

2018 Priority Area 1: Obesity as it Relates to Chronic Disease

Collaborative Efforts:

Swain Community Hospital with Harris Regional Hospital maintained chest pain accreditation through the Society of Cardiovascular Patient Care. Accreditation was achieved and maintained through community health screenings, heart health education, hands-only CPR training, and EMS collaboration.



Swain Community Hospital with Harris Regional Hospital collaborated with Western Carolina University to create a community initiative named Tuesdays to Thrive through the Ascent Partnership. The initiative was intended to pique the interest of community residents and engage in events promoting health education as well as activity. Swain Community Hospital, Harris Regional Hospital, and Western Carolina University partnered in hopes of generating positive

health behavior change and benefiting the communities in WNC.

<p>Community Programs</p>	<p>open and advertised to the public throughout WNC. There is a heart health lunch and learn or talk offered every February with one of Harris Cardiology cardiologists.</p> <p>Swain Summits was created in 2019 to combat obesity and chronic disease. The program offered a community health screening pre and post 12 months, with three health education videos and challenges each month, each targeting physical activity, nutrition, and mental health. Participants were placed on a team to help with accountability. Teams were also allowed to use a competitive platform, providing points for everything completed. Participants also received points for preventative health measures, such as an annual wellness exam, dental visit, and more. The participants with more improvement from pre to post received a prize.</p> <p>How well did we do it?</p> <p>All the community initiatives discussed have been successful:</p> <ul style="list-style-type: none"> • Tuesdays to Thrive averaged a dozen people in attendance per event • Swain Summits had over 233 participants in year one with significant weight loss and health score improvement • Heart disease diagnoses decreased by 6% from 2015.
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2018 Priority Area 2: Reduce Substance Abuse in our community	
Implementation Strategy Update	
Hospital Strategy	Evaluation/Note
	<p>How much did we do?</p> <p>The CHNA facilitator sits on the Coalition for a Safe and Drug Free Swain County. The Coalition represents an organization comprised of concerned and dedicated community members striving to educate as well as prevent substance</p>

<p style="text-align: center;">Community Collaboration</p>	<p>abuse. In addition to attending meetings, the facilitator provided space for various meetings and events in Swain Community Hospital and partnered with non-profit organizations to bring continued medical education programs to discuss substance abuse to physicians and providers.</p> <p>Swain Community Hospital participated in a local grant funding lock boxes and distributed over 25 lockboxes in the community.</p> <p>Swain Community Hospital also added Swain Comprehensive Pain Services in the community to provide interventional pain services. Dr. Allbright joined the team during this CHA cycle, aiding in pain management and reducing the number of prescription pills being distributed in the community.</p> <p>How well did we do it?</p> <p>In 2018, 3,978 opioid pills were dispensed in Swain County, continually decreasing to 3,201 in 2020. The percent of residents receiving opioids has also continued to decrease, moving from 27.9% in 2018 to 22.4% in 2020. This data indicates compliance among physicians and providers in the prescription regulations, as well as our hospital network being well informed and educated on community substance abuse issues. We can potentially attribute this awareness to CME courses targeting physicians in regard to substance abuse and the opioid epidemic; we can also attribute potential success to the Swain Comprehensive Pain Center taking a holistic approach through interventional pain services.</p> <p>Is anyone better off?</p> <p>A lower prescription rate means less access to abuse prescription pills, and more control on substance abuse.</p>
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CHAPTER 2 -- COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS

PURPOSE

Community Health Needs Assessment (CHNA) is a vital part of evaluating, promoting, and improving positive health outcomes within our community. The CHNA is a written report describing the current health status of the community, what has changed since the prior CHNA in 2018, and what indicators/health factors we need to impact to make our community healthier and happier.

What are the key phases of the Community Health Improvement Process?

In the **first phase** of the cycle, process leaders for the CHA collect and analyze community data – deciding what data they need and making sense of it. They then decide what is most important to act on by clarifying the desired conditions of wellbeing for their population and by then determining local health priorities.

The **second phase** of the cycle is community health strategic planning. In this phase, process leaders work with partners to understand the root causes of the identified health priorities, both what’s helping and what’s hurting the issues. Together, they make a plan about what works to do better, form workgroups around each strategic area, clarify customers, and determine how they will know people are better-off because of their efforts.

In the **third phase** of the cycle, process leaders for the CHA take action and evaluate health improvement efforts. They do this by planning how to achieve customer results and putting the plan into action. Workgroups continue to meet, and monitor customer results and make changes to the plan as needed. This phase is vital to helping work groups understand the contribution their efforts are making toward their desired community results.



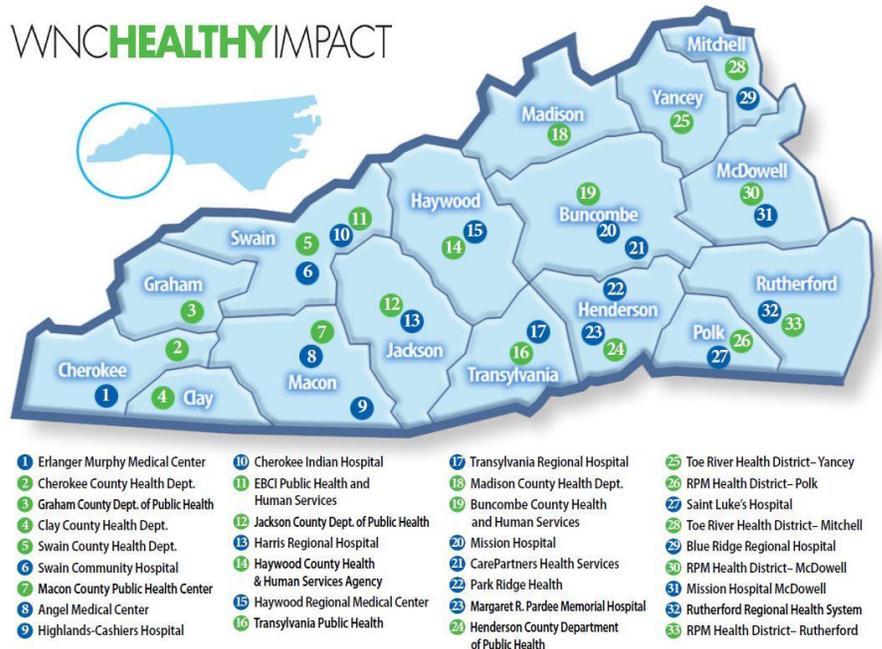
WNC Healthy Impact

WNC Healthy Impact is a partnership and coordinated process between hospitals, public health agencies, and key regional partners in western North Carolina working towards a vision of improved community health.

We work together locally and regionally to assess health needs, develop collaborative plans, take action, and evaluate progress and impact.

This regional initiative is designed to support and enhance local efforts by:

- Standardizing and conducting data collection,
- Creating communication and report templates and tools,
- Encouraging collaboration,
- Providing training and technical assistance,
- Addressing regional priorities, and
- Sharing evidence-based and promising practices.



This innovative regional effort is supported by financial and in-kind contributions from hospitals, public health agencies, and partners, and is coordinated by **WNC Health Network**. WNC Health Network, Inc. is an alliance of hospitals working together, and with partners, to improve health and healthcare. Learn more at www.WNCHN.org.

Data Collection Process

The set of data reviewed for our community health needs assessment process is comprehensive, though not all of it is presented in this document. Within this community health needs assessment, we share a general overview of health and influencing factors, then focus more on priority health issues identified through a collaborative process. Our needs assessment also highlights some of our community strengths and resources available to help address our most pressing issues.

Core Dataset Collection

The data reviewed as part of our community's health needs assessment came from the WNC Healthy Impact regional core set of data and additional local data compiled and reviewed by our local CHA team. WNC Healthy Impact's core regional dataset includes secondary (existing) and primary (newly collected) data compiled to reflect a comprehensive look at health. The following data set elements and collection are supported by WNC Healthy Impact data consulting team, a survey vendor, and partner data needs and input:

- A comprehensive set of publicly available secondary data metrics with our county compared to the sixteen county WNC region
- Set of maps accessed from Community Commons and NC Center for Health Statistics
- WNC Healthy Impact Community Health Survey (cell phone, landline, and internet-based survey) of a random sample of adults in the county
- Online key informant survey

Health Resources Inventory

We conducted an inventory of available resources of our community by reviewing a subset of existing resources currently listed in the 2-1-1 database for Swain County as well as formalizing a committee with community partners to gather all available resources. Where gaps were identified, we partnered with 2-1-1 to fill in, and we will continue to update this information throughout committee meetings to be sure we are providing current information.

Community Input and Engagement

The community's input and engagement were and is a vital part of the community health needs assessment. Swain Community Hospital partnered with Swain County Health Department in promoting and hosting a community listening session as well as presenting the CHA process and data to various community entities. The Community Wellness Action Team (CWAT) consists of the CHNA facilitator, health department CHA facilitator, and concerned or passionate community members; CWAT is intended to be a true representation of Swain County residents through the engagement of community members sitting on the committee in response to the CHA. The hospital and health department facilitators presented the community health assessment data to the CWAT committee, allowing them to narrow their focus for community presentations.

Public Health Department

North Carolina Health Departments are extremely robust and, in many instances, lead the CHA and Improvement process. Swain County Health Department was the convener of the stakeholders, along with Swain Community Hospital and WNC Healthy Impact, to gather the secondary community health information, and conducted the primary research. They also convened the Community Health meetings with Swain Community Hospital to receive input on the health priorities.

In the collaborative assessment process for our community, the Swain County Health Department is a key partner. They provided coordination for the local process that we help support and partner to implement. We are close partners, working on the CHNA process together step-by-step.

Participation

In all, 24 community stakeholders took part in the Online Key Informant Survey for our county, as outlined below:

Local Online Key Informant Survey Participation		
Key Informant Type	Number Invited	Number Participated
Community Leader	28	17
Other Health Provider	4	2
Physician	3	2
Public Health Representative	2	2
Social Services Provider	3	1

Through this process, input was gathered from several individuals whose organizations work with low-income, minority populations, or other medically underserved populations.

Online Survey Limitations

The Online Key Informant Survey was designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.

To collect this data, purposive sampling (a type of non-probability sampling which targets a specific group of people) was used. Unlike the random sampling technique employed in the telephone survey, the purpose is not to make generalizations or statistical inferences from the sample to the entire population, but to gather in-depth insights into health issues from a group of individuals with a specific perspective.

Input of Medically Underserved, Low-Income, and Minority Populations

The previous identified each participant that was involved in the CHA, how long they provided their input and what groups they represented. Many of the organizations involved represent the medically underserved, low-income, and minority populations.

Through this process, input was gathered from several individuals whose organizations work with low-income, minority populations, or other medically underserved populations.

Minority Populations Represented:	Medically Underserved Populations Represented:
African American	Adults
American Indian	Children
Asian	Dental Services
Children	Dental Services for Children
Disabled	Elderly
Hispanic/Latino	Hispanic/Latino
Low income	Immigrants
	Low income
	Mentally Ill
	Substance Abusers
	Unemployed
	Uninsured/Underinsured

At-Risk & Vulnerable Populations

Throughout the community health assessment process, our team was focused on understanding general health status and related factors for the entire population of our county as well as the groups, particularly at risk for health disparities or adverse health outcomes. For the purposes of the overall community health assessment, we aimed to understand differences in health outcomes, correlated variables, and access, particularly among medically underserved, low-income, and/or minority populations, and others experiencing health disparities.

Though there are no universally accepted definitions of the three groups, here are some basic definitions from the Health Department Accreditation Self-Assessment Instrument (in some cases definitions have been slightly altered to better represent our region):

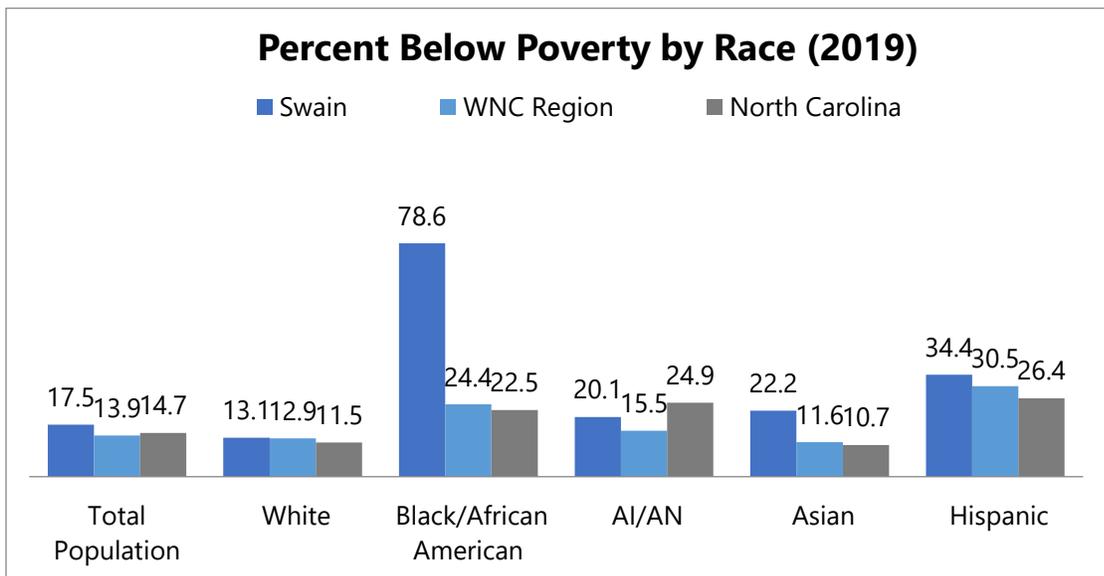
Underserved populations relate to those who do not access health care either because there is a lack of services or providers available or because of limitations such as income, literacy/language barriers or understanding on how to access services, cultural competency of clinicians, trust, transportation, etc.

At-risk populations are the members of a particular group who are likely to, or have the potential to, get a specified health condition. This could be from engaging in behavior (such as pregnant women whacksoo smoke) that could cause a specified health condition, having an indicator or precursor (high blood pressure) that could lead to a specified health condition or

having a high ACE score (traumatic experiences), which is correlated with increased risk of specified health conditions.

A vulnerable population is one that may be more susceptible than the general population to risk factors that lead to poor health outcomes. Vulnerable populations, a type of at-risk population, can be classified by such factors as race/ethnicity, socio-economic status, cultural factors, and age groups. The at-risk and vulnerable populations, the focus for our process and product include:

- Native American (30% in Swain County)
- Below poverty level
 - 13.1% of White (64.1% of the population)
 - 78.6% of African Americans% of the population)
 - 20.1% of Natives (30% of the population)
 - 22.2% of Asians (.4% of the population)
 - 34.4% of Hispanics (5.3% of the population)
- Uninsured rate is below 14% which is like the WNC average (14.5%)



Individuals in minority groups, the uninsured, or low-income may have unmet needs related to primary and chronic disease. In addition, those who do not have reliable transportation are at risk of poor health outcomes related to a lack of access to necessary health care, healthy food, facilities for physical activity, and other resources.



Location, Geography, and History of Swain County

Consisting of just over 525 square miles of land area, Swain County is in the far western region of North Carolina and is adjacent to the federal government’s Smoky Mountain National Park, and the Eastern Band of Cherokee Indian Reservation (EBCI). This rural, mountainous area of the Southern Appalachians is often recognized for its spectacular geographic diversity. With much of the land area located within the Great Smoky Mountains National Park, including its highest peak, Clingmans Dome, the area includes the scenic beauty of four rivers, the Nantahala, the Tuckasegee, the Oconaluftee and the Little Tennessee, and a major creek, Deep Creek, which flow through the county and helps to form the sprawling Lake Fontana located just minutes west of Bryson City, the county seat. The county also encompasses much of the Cherokee Indian Reservation, with its own independent government. Given this unique geography and co-location with two independent government organizations, Swain County government’s capability to raise significant program revenues to support programs and services is particularly acute given that over 85% of Swain County’s total land area is currently not taxable by local governmental units due to its ownership by either the national government or the Cherokee Indian Tribal government. A funding scenario that provides minimal revenue-generating potential at the local level while the local community attempts to address a growing high demand for services.



Figure 1: Swain County, North Carolina.
<https://www.ncpedia.org/geography/swain>

Formed in 1871 from parts of Jackson County and Swain County, the county was named for David L. Swain, governor of North Carolina from 1832 to 1835. With a population of just over 14,260 individuals according to the 2019 census and other population estimates, Swain County is the 89th least populated of 100 counties in the state. Moreover, economic data indicates that despite significant increases in employment and income, Swain County has 28.1% of children under the age of 18 years living in poverty, which is well above the regional and state averages. Today, the average population density is still less than 26.5 people per square mile and the per capita income is \$23,139 per year. A population that is often isolated in terms of socialization activities due to the non-existence of public transportation resources and difficulties in travel due to the mountainous nature of the local terrain. The major roadways that provide regional

transit routes for Swain County include US Highways 74 and 19 and State Highways 28. Most of the county's development occurs along these corridors and around the areas of the highway intersections including the area around the only incorporated municipality. The county is home to one incorporated municipality, Bryson City, and a few local communities including but not limited to Alarka, Ela, Almond, Wesser, Lauda, Whittier, Deep Creek, and Fontana Lake. Major geographic attractions include the water-oriented recreational uses of the Deep Creek and Fontana Lake areas as well as areas along the Tuckasegee River. Additional geographic attractions include the many hiking and trail paths including those in and out of the Smoky Mountain National Park areas and along with other areas of the Great Smoky Mountains.

Physical Environment

Air & Water Quality

In 2020, the Air Quality Index (AQI) measurement for Swain County was as follows:

- 341/362 days with good air quality
- 39/362 days with moderate air quality
- Small particulate matter was present at the level of pollutant on 171 out of 362 monitored days (United States Environmental Protection Agency, 2020)

The United States Environmental Protection Agency developed an ambient air quality trend for particle pollution – Particulate matter (PM). The term PM_{2.5} refers to fine inhalable particles, with diameters typically less than 2.5 micrometers. The county experienced 171 days when the air pollutant was at a PM of 2.5. Major concerns for human health from exposure to particulate matter are effects on breathing and respiratory systems, damage to lung tissues, and premature death. Small particulate matter in air pollution has the best chance of reaching the lower respiratory tract.

Exposure to radon is perhaps the most significant undervalued health problem in WNC. A screening level of 4 pCi/L is the Environmental Protection Agencies recommended action level for radon exposure. Radon is the number one cause of lung cancer. People who smoke have an even higher risk of lung cancer from radon exposure than people who don't smoke (General Radon Information, 2019). The average indoor radon levels of Swain County were 4 pCi/L in 2021, compared to the national average of 1.3 pCi/L, the radon level in Swain County was significantly higher (Air chek, 2021).

Additionally, secondhand smoke, environmental tobacco smoke (ETS), is a known human carcinogen with more than 7,000 chemical compounds, 250 of which are known to be harmful and 69 of which cause cancer (Health Risks of Secondhand Smoke, 2019). Approximately 9% of residents in Swain County indicated that they have breathed someone else's cigarette smoke at work in 2021, which was a dramatic decrease from 20% in 2018 (WNC Health Network, 2021). It is important to note that these numbers are impacted by the COVID-19 lock-down, specifically relating to those working remotely.

Clean water is also a prerequisite for health. Having access to clean water supports healthy brain and body function, growth, and development. While drinking water safety is improving, many contaminants still pollute our water sources – pharmaceuticals, chemicals, pesticides, and microbiological contaminants. In Swain County, 36% of the population was served by community water systems in 2020 (U.S. Census Bureau, 2021a).

Access to Healthy Food & Places

Access to healthy foods and places for recreation are both indicators of health. Without access and the financial means to purchase healthy foods, residents do not have the environmental support to live a healthy lifestyle. In Swain County, three grocery stores and three farmer’s markets exist to serve over 14,000 residents. Close to 4% of residents live in a food desert, meaning that they live below the poverty level, have no car, and have low access to a grocery store (U.S. Department of Agriculture Economic Research Service, 2021b). Surveyed residents were asked if they have worried in the past year about food running out before having money to buy more, and 21% reported that this was often or sometimes true for them, which was an 8% decrease since 2018 (WNC Health Network, 2021).

Additionally, if residents do not have access to a safe place for recreational opportunities, whether a park, greenway, walking trail, playground, etc., they are less likely to live an active lifestyle. In Swain County, there was one public recreation and fitness facility available to residents (U.S. Department of Agriculture Economic Research Service, 2021a).

Social and Economic Factors

As described by [Healthy People 2030](#), economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context are five important domains of social determinants of health. People with more education, healthy and safe living environments, and higher incomes have better health outcomes potentially generating longer life expectancies. Although these factors affect health independently, they also have interactive effects on each other and thus on health. For example, people in poverty are more likely to engage in risky health behaviors, and they are also less likely to have affordable housing. In turn, families with difficulties in paying rent and utilities are more likely to report barriers to access health care, higher use of the emergency department, and more hospitalizations.

Income & Poverty

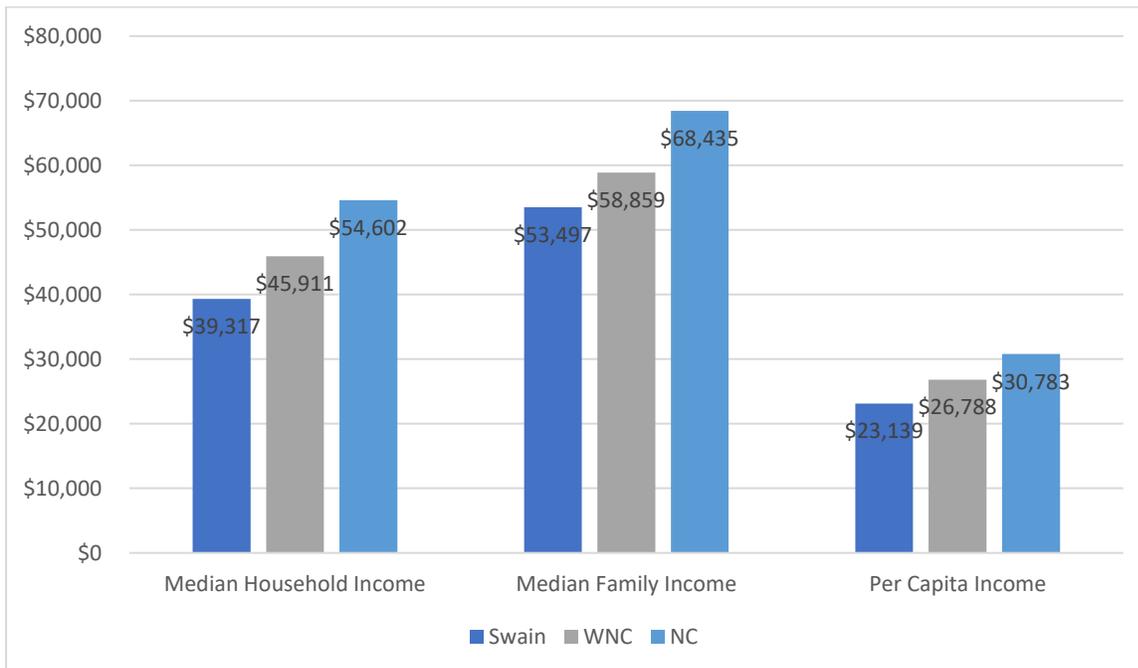
“People with steady employment are less likely to live in poverty and more likely to be healthy, but many people have trouble finding and keeping a job...In addition, many people with steady work still don’t earn enough to afford the things they need to stay healthy” (U.S. Department of Health and Human Services [USDHHS], 2021).

As of November 2021, Swain County was designated a Tier 1 designation from the NC Department of Commerce. A Tier 1 designation reflects the average unemployment rate, median household income, percentage growth in population, and adjusted property tax base per capita (North Carolina Department of Commerce, 2021). Swain County had a lower median household income, median family income, and per capita income compared to WNC and the state of North Carolina (see Figure 2).

Each category has increased in Swain County since the 2011-2015-time period. Swain County’s median household income was \$15,285 lower than North Carolina’s median household income (U.S. Census Bureau, 2021g).

Figure 2.

Income Level Comparison



Swain County’s poverty rates continue to be higher than WNC and NC in all categories – the total population, children under 18, and children under 5. The total population poverty rate trend in Swain County was at 17.5% in 2019, compared to WNC (13.9%) and NC (14.7%). In Swain County, WNC, and NC children suffer disproportionately from poverty (U.S. Census Bureau, 2021f). In Swain County, 28% of children under age 18 and 34% of children under the age of 5 are living in poverty.

Employment

As of 2020, the three employment sectors in Swain County with the largest proportions of workers (and average weekly wages) were:

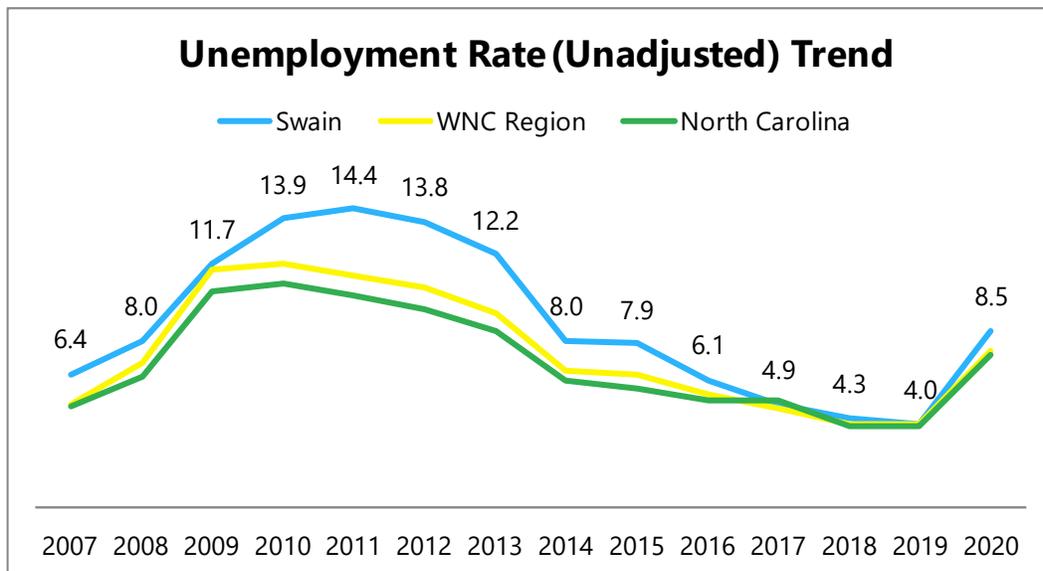
- Arts, Entertainment, and Recreation: 41% of the workforce earn \$713 per week.
- Public Administration: 25% of the workforce earn \$1,018 per week
- Health Care and Social Assistance: 9% of the workforce earn \$790 per week.

Throughout the period cited in the graph below (2007-2020), the unemployment rate in Swain County was lower than comparable rates in the WNC region until 2015. Since 2015, the unemployment rate had been on a steady decline until the pandemic. In 2020, the unemployment rate significantly increased in Swain County, reflecting the national trend due to the COVID-19 pandemic. The annual unemployment average in 2020 was 8.5%, which was a significant increase from 4% in 2019 (NC Department of Commerce, 2021). The unemployment rate reached its peak in May of 2020 at 21% and has slowly decreased. In March of 2021 the unemployment rate was 5%, returning to pre-pandemic numbers.

Due to the pandemic, 22% of Swain County residents lost a job and 26% lost hours or wages (WNC Health Network, 2021). Additionally, roughly 10% of residents lost health insurance coverage during the pandemic.

Figure 3.

Unemployment Rate Trend



It is important to note that a person is defined as unemployed if they:

- Had no employment during the week that includes the 12th of the month but was available to work
- Had made specific efforts to find employment during the four weeks prior
- Were waiting to be recalled to a job from which they had been laid off
- Were waiting to report to a new job within 30 days

Persons who have given up on finding employment are not included in this rate.

Education

“People with higher levels of education are more likely to be healthier and live longer...Children from low-income families, children with disabilities, and children who routinely experience forms of social discrimination – like bullying – are more likely to struggle with math and reading. They are also less likely to graduate from high school or go to college. This means they’re less likely to get safe, high-paying jobs and more likely to have health problems like heart disease, diabetes, and depression” (USDHHS, 2021).

- 31% of residents obtained a High School diploma or equivalent (U.S. Census Bureau, 2021b).
- 18% of residents obtained a bachelor’s degree or higher (U.S. Census Bureau, 2021b).
- The drop-out rate decreased in Swain County from 5.16 in the 2018-2019 year to 2.64 in the 2019-2020 school year (NC Department of Public Instruction, 2021).

Community Safety

“Many people face challenges and dangers they can’t control – like unsafe neighborhoods, discrimination, or trouble affording the things they need. This can have a negative impact on health and safety throughout life” (USDHHS, 2021). Community safety means not only violent acts in neighborhoods and homes but also unintended injuries such as, car accidents, poisonings, falls, fires, assaults, rape, robbery, and more. The chronic stress of living in an unsafe neighborhood can lead to accelerated aging, anxiety, depression, higher rates of pre-term births, etc. (CDC Community Health Navigator, 2019).

The index crime (the sum of all violent and property crimes), property crime (burglary, arson, and motor vehicle theft), and violent crime (murder, forcible rape, robbery, aggravated assault) rates were higher in Swain County than in WNC for 2019, which was the only year for this to occur in close to two decades (NC Department of Justice, 2021).

Housing

The percent among those in Swain County who spent more than 30% of income on owning a home increased dramatically from previous years, increasing by more than 10%; the approximate number previously was 13.4%, moving to 29% (see Table 4). Further, the percentage those who spent more than 50% of their income on owning a home increased by roughly 5%. While the cost of ownership has increased, the cost of renting has remained steady. Approximately 33% of renters spent more than 30% of their income on housing, which was the same as in previous years. Unfortunately, those who spent more than 50% of their income on housing increased by 5%. This data showed the dramatic gap between the cost of living and wages among residents in Swain County. The median cost of rent was \$597 and was recently reported as \$642

Table 4.

Housing in Swain County

Housing in Swain County (2015-2019)	
Renting Issues	Rates
Units spending more than 30% of income on housing	32.7%
Units spending more than 50% of income on housing	18%
Median Gross Rent	\$
Owning Issues	Rates
Units spending more than 30% of income on housing	29.3%
Units spending more than 50% of income on housing	11.7%
Median Monthly Owner Costs	\$1,099

Family & Social Support

“People’s relationships and interactions with family, friends, co-workers, and community members can have a major impact on their health and well-being...Many people face challenges and dangers they can’t control – like unsafe neighborhoods, discrimination, or trouble affording the things they need. This can have a negative impact on health and safety throughout life” (USDHHS, 2021).

Data from the community-wide telephone survey conducted in Swain County provides additional insight into the social/emotional support of county residents. When asked about

social/emotional support, 70% of residents state they “always” or “usually” get the support they need (WNC Health Network, 2021). Unfortunately, this number has been steadily declining since 2012 (84%). Approximately 21% of Swain County residents reported their typical day as being extremely or very stressful in 2021, which was the highest in Western North Carolina and higher than NC. While 21% reported their typical day as being extremely or very stressful, 87% reported feeling confident in managing the stress. Further, close to 90% reported they can stay hopeful during difficult times. Unfortunately, the percent of residents unable to obtain needed mental health services has been on a steady incline since 2012; in 2012 7% reported they were unable to get services needed but in 2021 the percentage rose to 16%.

Table 5.

Social and Emotional Support

Family & Social Support in Swain County	
Support	Rate/Incidents
“Always/Usually” Get Needed Social and Emotional Support in 2012	84.3%
“Always/Usually” Get Needed Social and Emotional Support in 2015	78.8%
“Always/Usually” Get Needed Social and Emotional Support in 2018	74%
“Always/Usually” Get Needed Social and Emotional Support in 2021	70.2%



CHAPTER 4 – COMMUNITY SERVED

Population

In 2019, 13,981 residents lived in Swain County, which is a slight increase from the 2010 census. Many residents are Caucasian (64%) with minorities represented as follows: American Indian/Alaskan Native (30%), Hispanic/Latino (5%), African American (.5%), and Asian (.4%; U.S. Census Bureau, 2021a). Swain County has a significantly larger proportion of American Indians and a significantly lower proportion of African Americans and other minority groups than the WNC region and NC. The median age of Swain County residents was 42 years – five years younger than the WNC regional average and three years older than the NC average. When compared to the WNC averages, Swain County had a lower percentage of older adults and a higher percent of younger individuals (5-19 years).

The birth rate in Swain County has been on a steady decline (from 13.6 in 2007-2011 to 12.1 in 2015-2019), which was a trend seen in WNC and NC. Swain County's birth rate was above the WNC average of 9.3 and consistent with the NC birth rate (NC SCHS, 2021g). In Swain County, there were 5,620 households in the five-year estimate from 2015 to 2019. In households where children were 18 years or younger, 14% of the households were headed by a married couple, 5% were headed by a single female, and .8% were headed by a single male. Additionally, 453 grandparents lived with their grandchildren under age 18, and 59% of grandparents were also financially responsible for their grandchildren (U.S. Census Bureau, 2021e). Approximately 48% of grandparents responsible for grandchildren identified as white, with 49% identifying as American Indian.

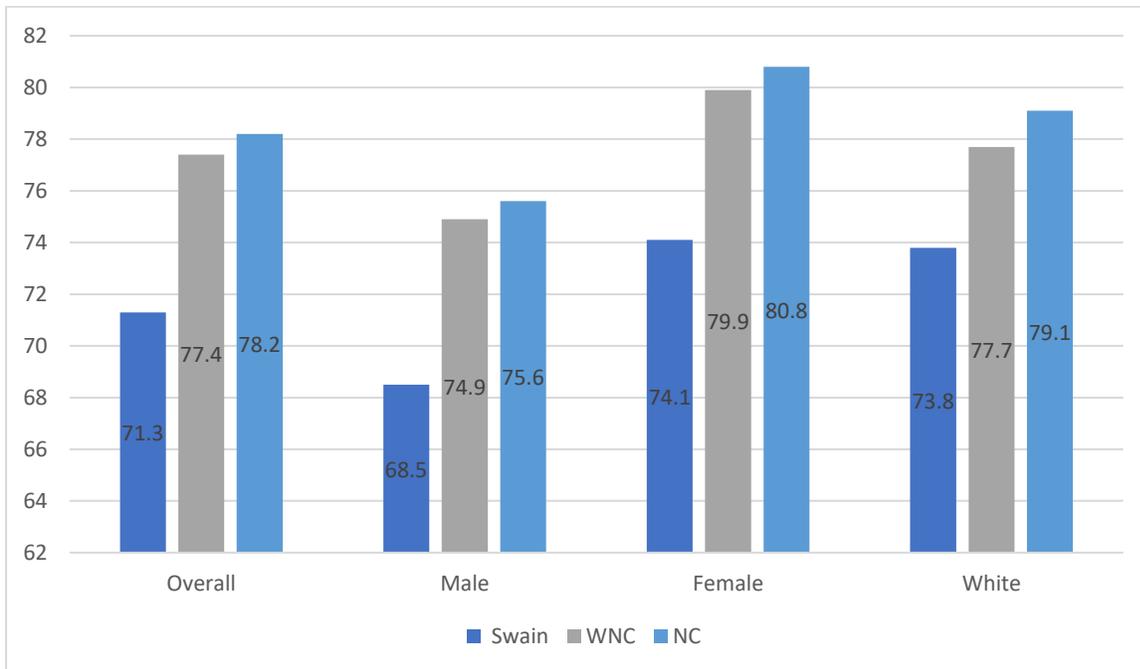
A new question was added to the community health survey in 2021, directly relating to homelessness. Approximately 2% of Swain County residents lived on the street, in a car, or in a temporary shelter in the past three years, which was consistent with the WNC regional average (2.3%; WNCHN, 2021). Further, 6.6% reported having to live with a friend or relative in the past

three years due to a housing emergency. An alarming 28.6% of residents reported always or usually worrying about paying rent or mortgage in the prior year. Currently, finding adequate housing for individuals and families, especially during the harsh winter months has proven difficult. This has quickly become an issue in the county and local leaders and advocates are discussing ideas and solutions.

In Swain County, the overall life expectancy in a single three-year aggregate from 2017 to 2019 was 71.3 years, which was well below the regional average (77.4) and state average (78.2; North Carolina State Center for Health Statistics [NC SCHS], 2021c).

Figure 4.

Life Expectancy at Birth (2017-2019)



The leading causes of death in Swain County mirror those of NC -- Total cancer, diseases of the heart, and chronic lower respiratory disease (CLRD) are the top three leading causes of death in our community (NC SCHS, 2020).

Table 3.*Cause of Death in 2020*

Rank	Cause of Death	Swain	
		# Deaths	Death Rate
1	Cancer	209	207.1
2	Diseases of Heart	197	202.4
3	Chronic Lower Respiratory Diseases	67	66.5
4	Diabetes Mellitus	44	45.5
5	All Other Unintentional Injuries	42	59.1
6	Cerebrovascular Diseases	36	38.2
7	Alzheimer's disease	35	36.4
8	Chronic Liver Disease and Cirrhosis	28	30.2
9	Pneumonia and Influenza	25	25.5
10	Nephritis, Nephrotic Syndrome, and Nephrosis	17	
11	Septicemia	16	
12	Suicide	13	
13	Unintentional Motor Vehicle Injuries	13	
14	Homicide	4	
15	Acquired Immune Deficiency Syndrome	0	
All Causes (some not listed)		996	1,055.2

Source: NC Center for Health Statistics, 2021.

Roughly 30% of the residents in Swain County identified as Native American. As a portion of the Cherokee Indian Reservation is housed in Swain County, it is pertinent to include the Native American population in our community served. According to the Indian Health Services, American Indians and Alaskan Natives born today have a life expectancy that is on average 5.5 years less than all races in the U.S. (Indian Health Service, n.d.). American Indians and Alaskan Natives continue to die at a higher rate than other Americans due to chronic liver disease and cirrhosis, diabetes, unintentional injuries, assault/homicide, and chronic lower respiratory diseases (Indian Health Service, n.d.).

Community Served

Swain Community Hospital's health information provided the basis for the geographic focus on the CHNA. The map below (view figure 6) shows where Swain Community Hospital received its patients; most of the hospital's inpatients came from Swain County. Specifically, approximately 199 in-patient experiences were residents who indicated they resided in Swain County, which is 53% of our patients at Swain Community Hospital. It was reasonable to select the Swain

Community Hospital as a primary focus of the CHNA due to half of inpatient activity traffic to the hospital being from Swain County. With that being said, surrounding counties could benefit from efforts to improve health in the county.

The service area includes medically underserved, low-income and minority populations who live in the geographic area from which the hospital draws its patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under the hospital's financial assistance policy.

Swain Community Hospital Patients – 2018

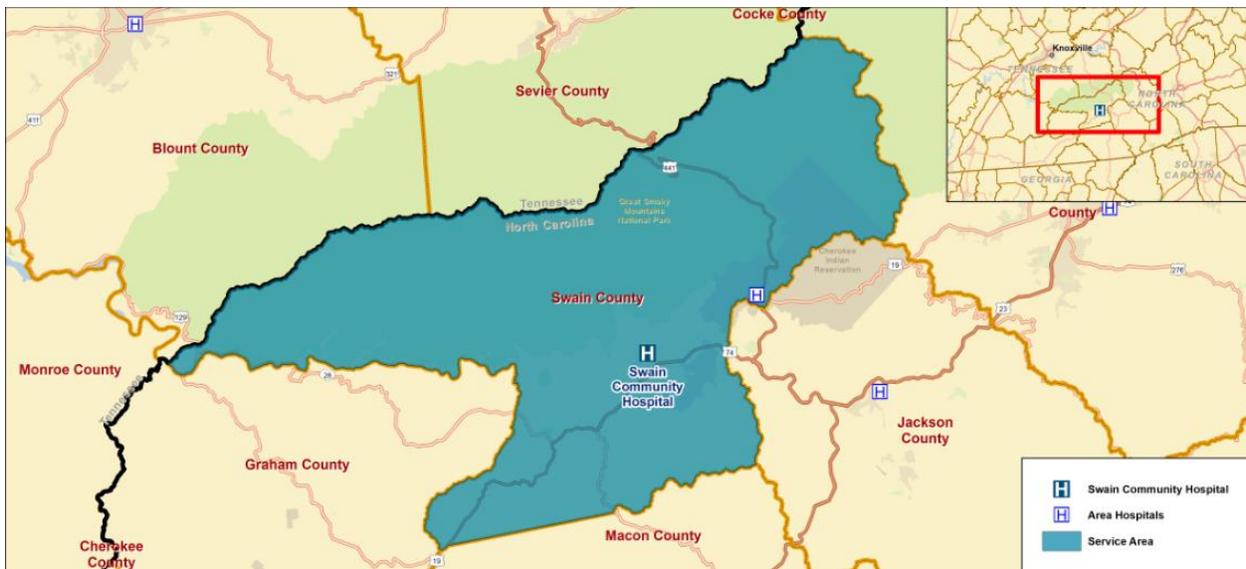


Figure 6: 2018 Planning Service Area Definition. *Casemix*, 2018.

CHAPTER 5 -- HEALTH NEEDS IN OUR COMMUNITY



Health Status

Data on the health status of our community [Swain County](#), and health factors that influence health are included in the full community health assessments for Swain County.

The collaborative local assessments include a **basic review of trends and progress and changes in health status** for the broad community. These assessments also include **details on populations at risk or facing health disparities** in our community.

Health Status & Behaviors

In 2020, Swain County was ranked 79th overall in overall health factors (out of 100). The county was ranked dead last in terms of length of life. The other health outcomes included – quality of life, which Swain ranked 79th, and overall health outcome ranking, which was 97th out of 100. Ranking of county health factors were as follows:

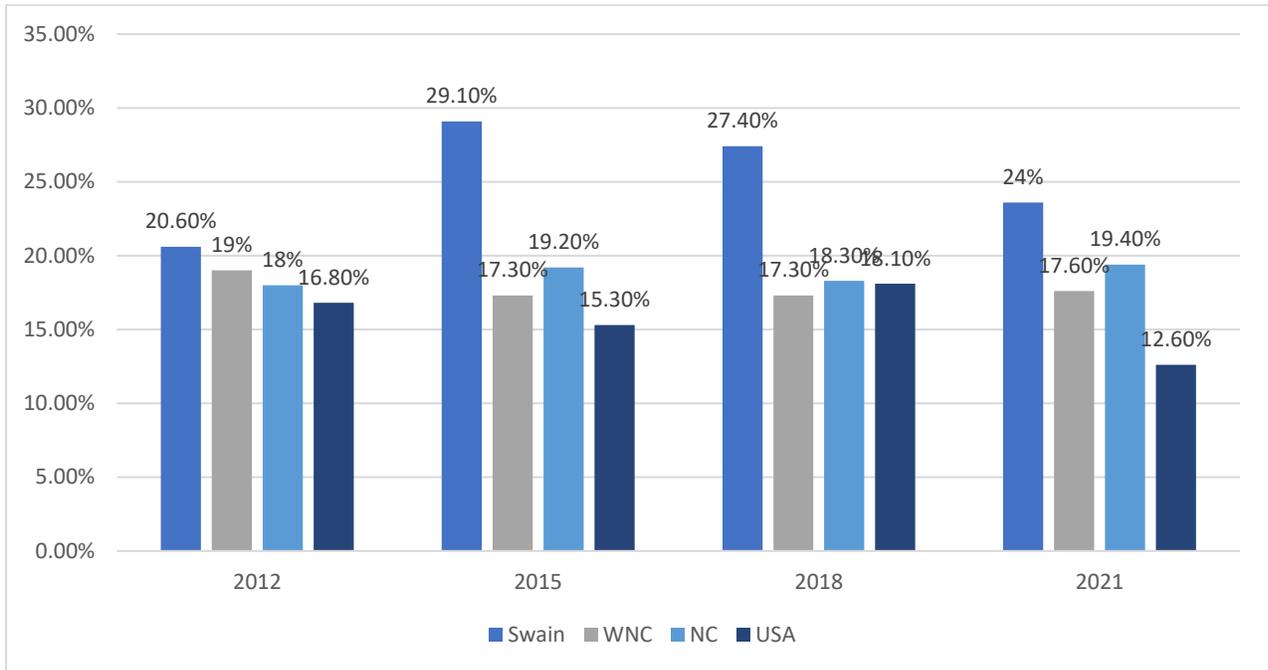
- Health Behaviors – 75th
 - Includes adult smoking, adult obesity, physical inactivity, access to exercise opportunities, alcohol-impaired driving deaths, and more.
- Clinical Care – 94th
 - Includes uninsured, primary care physicians, dentists, mental health providers, mammography screenings, and more
- Social & Economic Factors – 73rd
 - Includes high school graduation, unemployment, children in poverty, social associations, violent crime, and more.
- Physical Environment – 26th
 - Includes air pollution-particulate matter, drinking water violations, severe housing problems, and more.

Swain County improved in each of the health factors categories from 2018, however, overall health outcomes diminished. To confirm these health factors, the percent among residents reporting fair to poor physical health decreased from 2018 to 2021, improving from 27% to 24%. However, the percent of Swain County residents experiencing fair to poor health was well above the regional, state, and national averages. It is encouraging to see a positive trend in health yet humbling to note how far residents are from the average. While health factors

improved for residents, roughly 14% reported the county as a fair or poor place to live, which was an increase from 2018 and above the regional average (WNC Health Network, 2021).

Figure 6.

Experience “Fair” to “Poor” Physical Health



Chronic Disease and Health

Chronic disease is a notable issue in Swain County, particularly cancer, heart disease, chronic lower respiratory disease, and diabetes.

Cancer was the leading cause of death in Swain County, with colorectal, prostate, lung, and breast, being dominant in this community (NC SCHS, 2020b). Lung cancer incident rates have increased from 2014-2018, whereas breast cancer incident rates have steadily decreased since 2012-2016 (NC SCHS, 2021b). Prostate cancer incident rates have been on a steady incline since 2008-2012. Colorectal cancer incident rates have remained stable since 2007-2011. Cancer incident rates appear to be on the rise among lung and prostate cases.

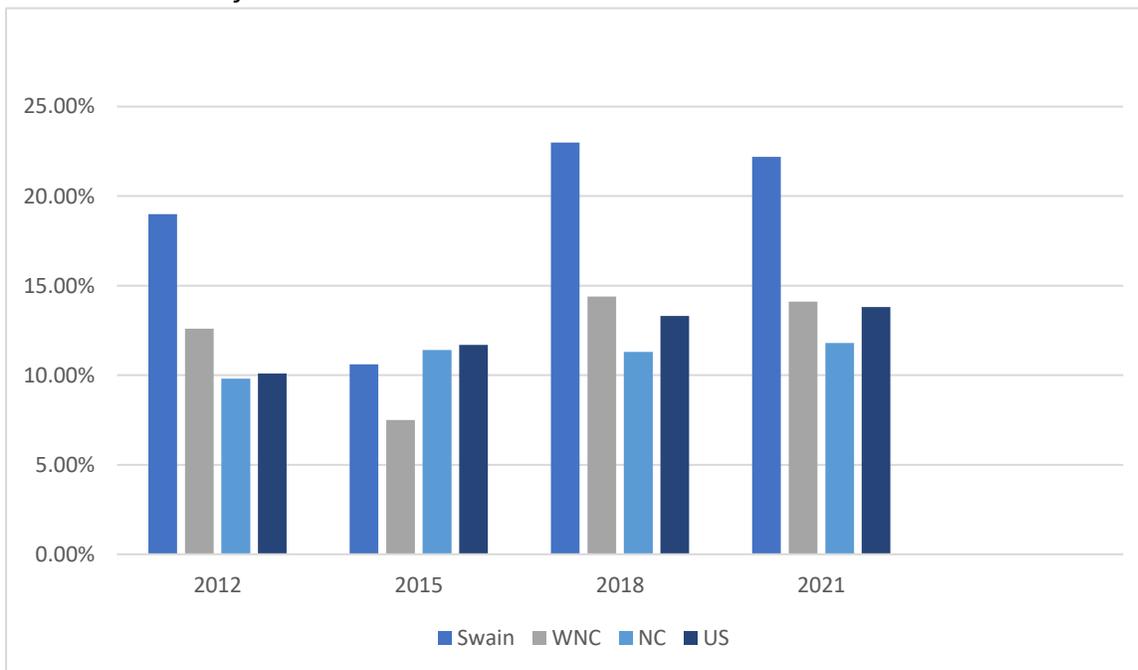
The second leading cause of death in Swain County was cardiovascular disease, which includes heart attack, angina, or coronary heart disease. Roughly 8% of respondents to the survey indicated they had been diagnosed with cardiovascular disease in 2021, which was similar to the WNC average (7.6%; WNC Health Network, 2021). Fortunately, high blood pressure diagnoses have decreased by roughly 3% since 2018 (WNC Health Network, 2021).

The third leading cause of death in Swain County was Chronic Lower Respiratory Diseases. Approximately, 13% of Swain County residents reported being diagnosed with Chronic Obstructive Pulmonary Disease (COPD), Bronchitis, or Emphysema in 2021, which was a significant decrease from 2018, where 22% of residents reported being diagnosed (WNC Health Network, 2021). The significant decrease was reflected in many counties in WNC, potentially demonstrating the effects of the COVID-19 pandemic.

Diabetes was also a prevalent topic within Swain County in rural Appalachia. In 2018, 23% of residents reported having diabetes, which doubled since 2015 (10.6%; WNC Health Network, 2021). Unfortunately, the diagnosis of Diabetes has remained steady since 2018, with 22% of residents reporting being diagnosed in 2021. The population with Diabetes in Swain County was significantly above the WNC, state, and national average, and the continued elevation of diagnoses causes great room for concern.

Figure 8.

Prevalence Rate of Diabetes



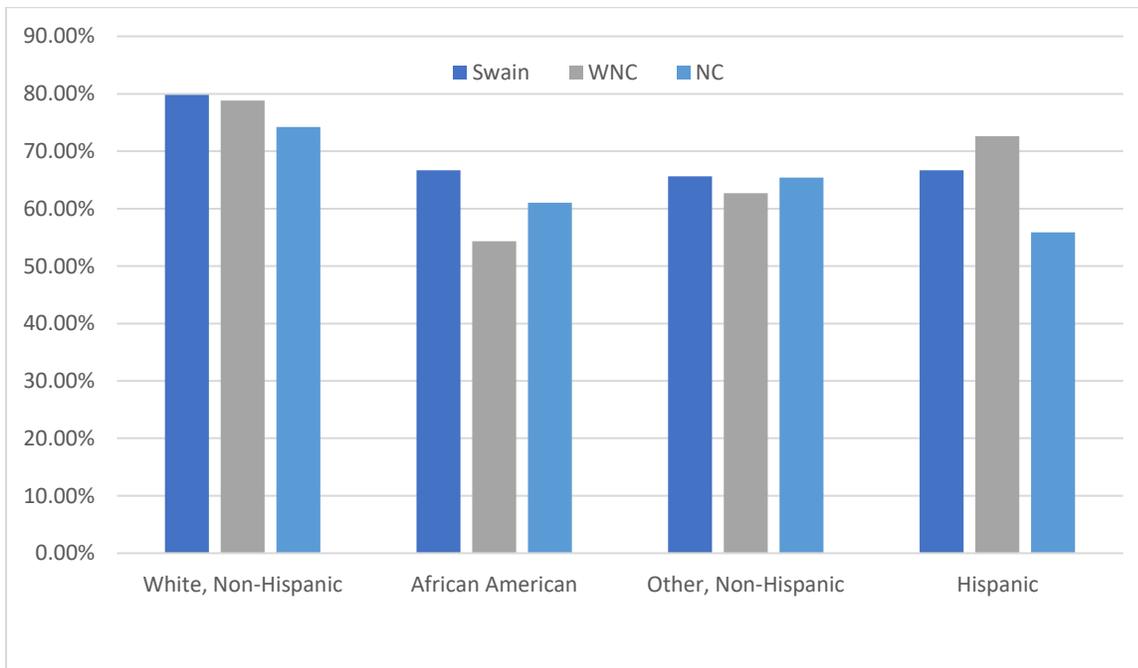
Maternal & Infant Health

The pregnancy rate among women aged 15 to 44 years has fluctuated for the past decade in Swain County (NC SCHS, 2021g). In 2019, the pregnancy rate in Swain County was 75.1 with a total of 196 pregnancies. The latest pregnancy rate (2019) was well above the regional average (62.5) and state average (69.6).

The teen pregnancy rates have continuously declined since 2007. The pregnancy rate among women aged 15 to 19 years was 13 in 2019 (NC SCHS, 2021g). Swain County has continued to be significantly below the regional and state average for teen pregnancy. White non-Hispanic women were identified as the greatest group of teen pregnancies (7) in 2019, followed by American Indian women (5). Women receiving prenatal care in the first trimester increased from 2018 to 2019, with 73.5% of women receiving needed care in Swain County (NC SCHS, 2021a). Compared to 2018, in 2019, pre-natal care increased among white, non-Hispanic, and Hispanic women, however, it decreased among African American women. In fact, 80% of white women and 67% of Hispanic women received needed care in 2019 (see Figure 9).

Figure 9.

Percentage of Pregnancies Receiving Prenatal Care in the First Trimester, by Race



One of the difficult issues we face in the WNC region is women smoking during pregnancy; WNC has nationally high percentages of women who smoke during pregnancy. In recent years, Swain County has declined in tobacco use during pregnancy. In 2018, the prenatal smoking trend rate was 22.7 and in 2019 the rate was 18.8. This was a significant decrease year over year (NC SCHS, 2021g).

The infant mortality rate in Swain County has steadily increased for the better part of a decade. Since the 2012-2016 aggregate year, the infant mortality trend has been increasing, climbing to 10 infant deaths in 2015-2019 (NC SCHS, 2021e). Unfortunately, Swain County was well above the regional and state averages. The regional infant mortality rate was close to 6 with the state average close to 7.

Injury & Violence

The number of unintentional falls related to death among the elderly population has remained low (NC SCHS, 2021d). There were not any deaths related to unintentional falls in ages 65 and over in 2019.

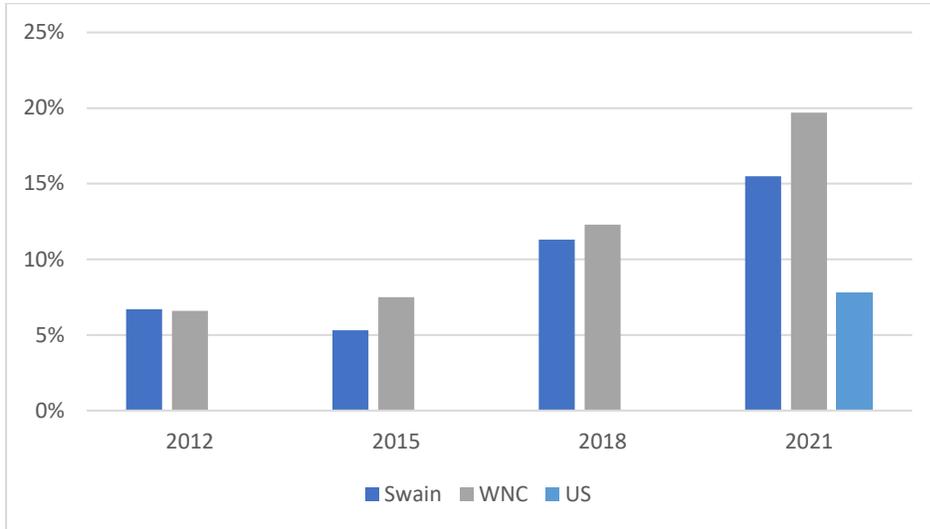
Substance Use

In 2019, there were six unintentional opioid overdose deaths in Swain County, which was below the regional average of 11 (NC Opioid Action Plan, 2021). In 2020, there were 30 emergency department visits with an opioid overdose diagnosis, which was a dramatic increase from 2019 (17). While this statistic was alarming for Swain County, it was below the regional average of 44. While overdoses were on the rise, the pills being dispensed continued to decrease. Since 2015, the percent of residents receiving opioid pills has decreased alongside the number of opioid pills being dispensed. In 2020, 3,201 opioid pills were dispensed and 22.4% of residents received opioid pills, compared to 5,409 pills dispensed and 37.5% of residents receiving pills in 2015. Based upon this data, the opioid epidemic has been mitigated by pills prescribed and dispensed.

According to the primary survey conducted in 2021, close to a quarter (24%) of residents experienced seven or more days of poor mental health in the past month, which was an increase from 2018 (13.5%; WNC Health Network, 2021). In contrast, 70% of residents reported “always/usually” getting the social and emotional support that they needed, which was roughly a 4% decrease from 2018. In fact, there was a dramatic decrease among residents since 2012. In conjunction, 16% of residents were unable to get the mental health care needed in 2021, which was a 5% increase from 2018 (see Figure 10). The inability to obtain mental health care services has been on a dramatic incline since 2012, demonstrating the true lack of resources available to residents in Swain County.

Figure 10.

Unable to Obtain Mental Health Services in the Past Year



Clinical Care & Access

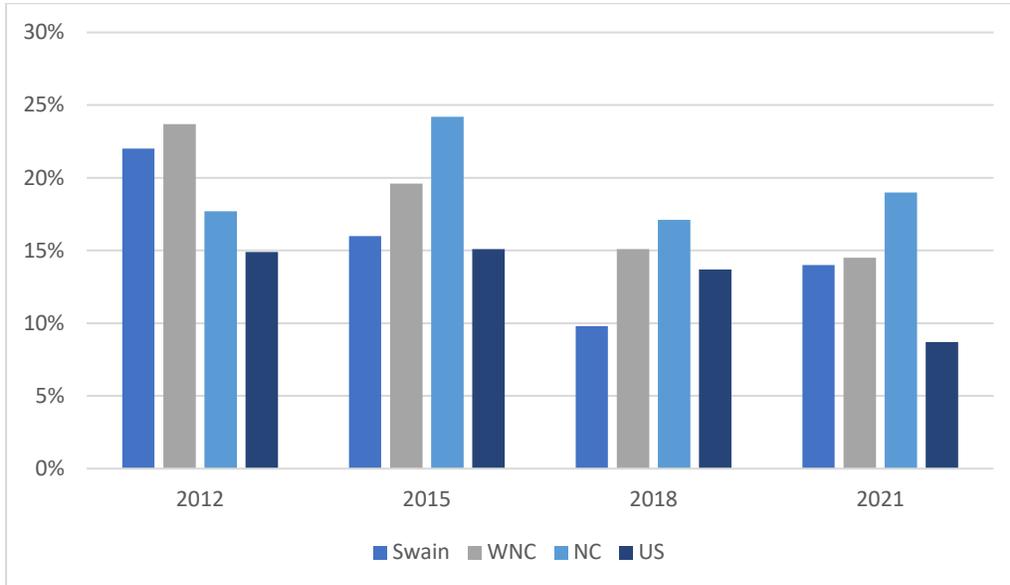
In 2021, roughly 12% of Swain County residents reported they were unable to get needed medical care in the previous year (WNC Health Network, 2021). This remained steady from 2018 with a 1% decrease from 12.6%.

The number of health professionals in 2019 in accordance with the number of active health professionals per 10,000 population ratio is as follows: 23 physicians, 10.5 primary care physicians, 3.5 dentists, 133 registered nurses, 14 physician assistants, and 17.5 nurse practitioners (Cecil G. Sheps Center for Health Services Research, 2021). The healthcare workforce in Swain County has increased in 2019, with the only decrease in the workforce being dentists. Roughly 13% of the primary care physicians are over the age of 65, with the physicians closely behind at 12% (Cecil G. Sheps Center for Health Services Research, 2021). It is important to note that these numbers were not updated in 2021, which would have reflected a decrease in staffing at Swain Community Hospital.

The percentage of Swain County residents without health insurance has increased from 2018, with approximately 14% of residents uninsured compared to 10% in 2018 (see Figure 11). In 2021, Swain County was equal to the region, below the state, and above the national uninsured average, all during the COVID-19 pandemic.

Figure 11.

Lack of Health Insurance



In 2020, there were 5,419 individuals eligible for Medicaid in Swain County, which equated to roughly 38.7% of the residents in Swain County. Of those individuals authorized for Medicaid, the distribution is as follows: 2,065 Aid to Families with Dependent Children (AFDC), 867 infants and children, 854 family planning, 547 disabled, 296 aged, 32 foster care, 25 pregnant women, and 1 blind (NC Department of Health and Human Services, 2021b).

The licensed facilities reported are limited in Swain County. There are only two licensed adult care facilities – Bryson Senior Living and Mountain View Manor Nursing Center (North Carolina Department of Health and Human Services, 2021a). The Bryson Senior Living has a max capacity of 50 residents, and Mountain View Manor Nursing Center has a max capacity of 120 residents. Tsali Care is located on EBCI Reservation and has a max capacity of 60 residents. Further, the county houses two home health establishments that collaborate to provide the best care possible – PRN Nursing Services and Swain County Health Department.

Swain County houses three licensed mental health facilities, however, none of these facilities can house residents or have beds (NC Department of Health and Human Services, 2021a). The need for expansive mental health services is on the forefront in the county. Residents of Swain County indicated that 70% of the population surveyed felt they “always” or “usually” get needed social/emotional support when needed, which decreased compared to 2018 (WNC Health Network, 2021).

Medically underserved, low-income, and minority populations

Swain County residents who completed the survey indicated that roughly 24% were in “fair/poor” physical health, which was a decrease from 2018 (WNC Health Network, 2021). Unfortunately, this percentage was among one of the highest in WNC. The county was predominantly comprised of Caucasian Americans, with well over half of the population identifying as “white” (64%). The next highest race and ethnicity identification within the county was Native American, and approximately 30% identified as Native American, which was 4,268 individuals. While, Caucasians and Native Americans made-up a majority of the population, African Americans suffered at the hand of poverty the greatest, with 79% living in poverty in 2019.

The low-income and underserved individuals are of the highest percentage among African Americans and Hispanics, both making up less than 7% of the population in Swain County.

- Native American (30% in Swain County)
- Below poverty level
 - 13% of Caucasian
 - 79% of African American
 - 20% of Native American
 - 22% of Asian American
 - 34% of Hispanics

The percentage of people unable to get needed medical care in the previous year in Swain County remained the same from 2018, with roughly 12% unable to get needed medical care. Although a majority of the population received the needed healthcare in 2021, the percentage of those uninsured increased. In 2019, approximately 10% of residents were uninsured, compared to 2021, where 14% were uninsured. It is important to note the effect of the COVID-19 pandemic, and the impact on job status, wages, and insurance. Roughly 10% of residents in Swain County reported losing insurance coverage during the pandemic, creating an increase in the uninsured rate from 2018. Due to the pandemic, roughly 22% of residents in Swain County lost their job in 2021 (WNC Health Network, 2021). In addition, roughly 26% lost hours or wages during the pandemic.

Health Issues

Process

During our group process, the following criteria were applied to the issues listed above to select priority health issues of focus for our community over the next three years:

- Criteria 1 – Relevant – How important is this issue? (*Urgency to solve problem; Community concern; Focus on equity; Linked to other important issues*)
- Criteria 2 – Impactful – What will we get out of addressing this issue? (*Availability of solutions/proven strategies; Builds on or enhances current work; Significant consequences of not addressing issue now*)
- Criteria 3 – Feasible – Can we adequately address this issue? (*Availability of resources -- staff, community partners, time, money, equipment -- to address the*

issue; Political capacity/will; Community/social acceptability; Appropriate socio-culturally; Can identify easy, short-term wins)

Due to COVID-19, members of C-WAT voted using an online platform called survey monkey. Committee members were asked to vote on new priorities.

Identified Indicators

During the above process, the Community Wellness Action Team identified the following health indicators:

- **Obesity:** A weight that is higher than what is considered healthy for a specific height. 49% of the population in Swain County reported being obese in 2021.
- **Physical Activity:** Movement that is produced by skeletal muscles requiring caloric expenditure. Roughly 22% of residents reported meeting physical activity guidelines in 2021.
- **Nutrition:** Obtaining the recommended amount of nutrients within a day yields positive health results. Only 2.8% of people surveyed indicated that they got 5 or more servings of fruits and/or vegetables in a day, which was 3% lower than the WNC average.
- **Food Insecurity:** Unreliable access to enough affordable nutritious food. Roughly 21% of citizens in Swain County indicated being food insecurity in 2021, which decreased from 2018 and was well below the national average of 34%.
- **Heart Disease:** A disease that affects the heart muscles, valves, or rhythm. Heart disease was the second leading cause of death in Swain County.
- **Diabetes:** The body's inability to produce or respond to the hormone insulin, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood and urine. Approximately 22% of residents reported having Diabetes in 2021, which was comparable to 2018. While Diabetes rates stayed the same, they were well above the regional, state, and national averages.
- **COPD:** A lung disease indicated by chronic obstruction of airflow that interferes with normal breathing and cannot be reversed. 13% of individuals reported having COPD, which was a 9% decrease from 2018.
- **Opioids:** Opioids are prescribed by physicians as pain relievers and can be extremely addictive. 19% of individuals in the survey reported using opioids in the past year with or without a prescription, and approximately 55% reported that their life had been negatively affected by substance abuse.

- **Tobacco:** All use of tobacco products decreased from 2018 to 2021. Those who identified as current smokers decreased by 5%, those who identified as smokeless tobacco users decreased by 4%, and those who identified as using e-cigarettes decreased by 2%.

Identified Priorities

The following priority health issues are the final community-wide priorities for our county that were selected through the process described above:

- Chronic Disease as it relates to obesity with Swain County community members – Chronic disease emerged as a health priority during the 2015 Community Health Assessment, and obesity was identified as a priority in 2011. Progress has occurred in several areas related to chronic disease; however, much improvement is still to be made, based on our overweight/obesity rates, fruit/vegetable consumption rates, and heart disease rates. During the prioritization process, community members voted for the following identified health indicators to remain the same:
 - Obesity
 - Heart Disease
 - Food Insecurity

C-WAT opted to combine chronic disease and overweight/obesity to form a long-term healthy priority (chronic disease as it relates to obesity) with hopes of addressing all-encompassing aspects of this priority. This health priority is also in line with the NC Healthy People 2030 objectives.

- Substance Use Prevention and Reducing Substance Abuse – Substance abuse emerged as a health priority during the 2011 and 2015 CHA cycles. During the 2011 cycle, the community focused on risky behaviors in adolescents, specifically targeting healthier lifestyles among teens. In 2015, the priority of substance abuse expanded into high mortality rates due to unintentional poisoning, specifically by medication and drug overdoses. During this cycle, the community health assessment also began to focus on Hepatitis B cases. The 2015 substance abuse priority was targeted by implementing prescription take-back events, permanent drop box locations, naloxone distribution, and the creation of the Coalition for a Safe and Drug-Free Swain County.

Progress has been made in various subsets of the substance abuse priority; however, the opioid pandemic continues as evidenced by the data. In 2022, Swain County will continue to work on substance use prevention and reducing substance abuse in partnership with the Coalition for a Safe and Drug-Free Swain County.

Priority Health Issues

Priority Indicator #1: Chronic Disease as it Relates to Obesity



Swain County's leading cause of death, as well as many of the morbidity statistics of concern, are directly related to weight, physical activity, and nutrition. Excess weight increases risk of type 2 diabetes, high blood pressure, heart disease, certain cancers, and stroke. Chronic disease in relation to obesity has been a priority in Swain County for over a decade.

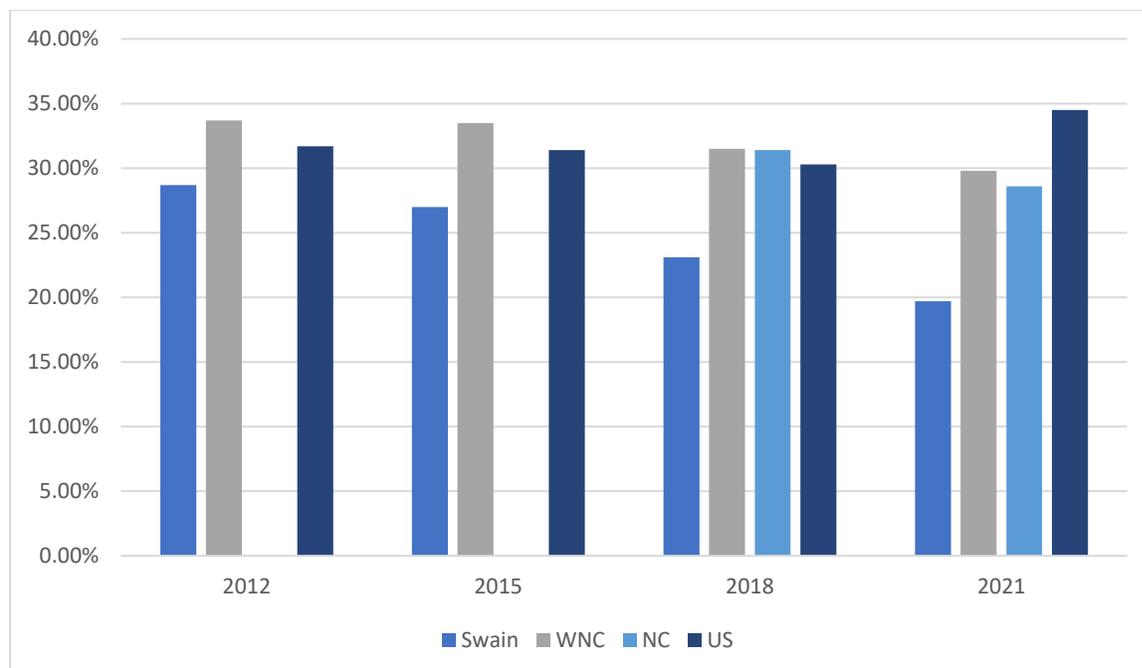
Data Highlights

Health Indicators

As poor nutrition and physical activity go hand-in-hand, the outcome of both can be overweight/obese. The Healthy People 2030 Target for adult obesity is a 3% decrease or more. Roughly 49% of Swain County residents were considered obese in 2021, which remained the same from 2018. Additionally, residents who identified as overweight or obese increased from 75.5% to 79.8% in three years. In conjunction, residents at a healthy weight decreased from 23% in 2018 to 20% in 2021. These data points are showing negative trends among residents.

Figure 12.

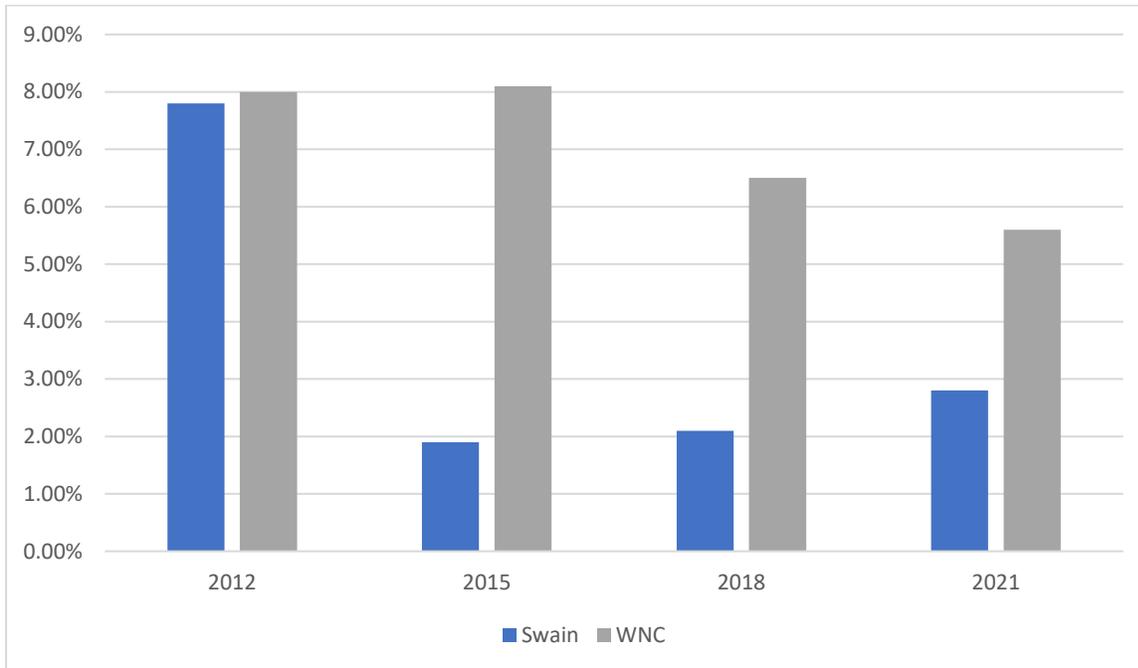
Healthy Weight



Residents of Swain County indicated they ate significantly less than the recommended fruit and vegetable serving (5 servings a day) within the past week. Unfortunately, this number decreased from 7.3% in 2018 to 5.5% in 2021.

Figure 13.

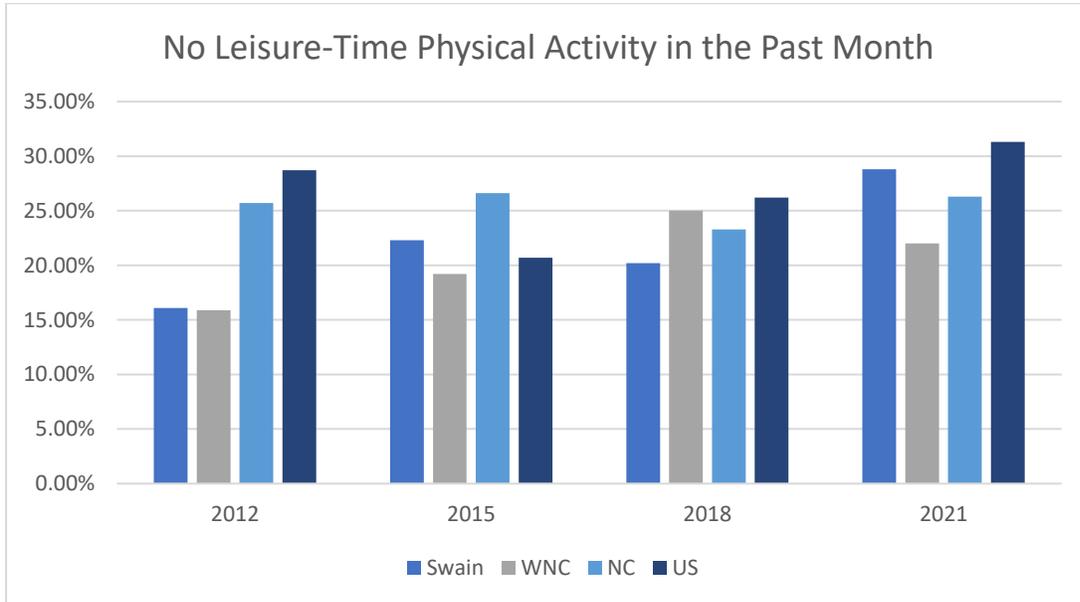
Consuming the Recommended Servings of Fruits/Vegetables Per Day



In 2018, the primary data results showed an increase among adults who did not participate in leisure-time physical activity, and this trend continued into 2021. Less than a quarter of Swain County residents surveyed reported meeting physical activity recommendations of 150 minutes or more of physical activity per week (see figure 14). Participation in strengthening activities also decreased from 2018 to 2021, with 30% of residents participating in strength training in 2021. Swain County does offer safe places to participate in physical activity, but some residents must travel 30 minutes or more to reach a park or safe walking space. The mountain terrain provides an excellent backdrop well as a recreational activity; however, it makes it improbable to walk as transportation without sidewalks, which presents a seemingly insurmountable challenge for a large portion of our community.

Figure 14.

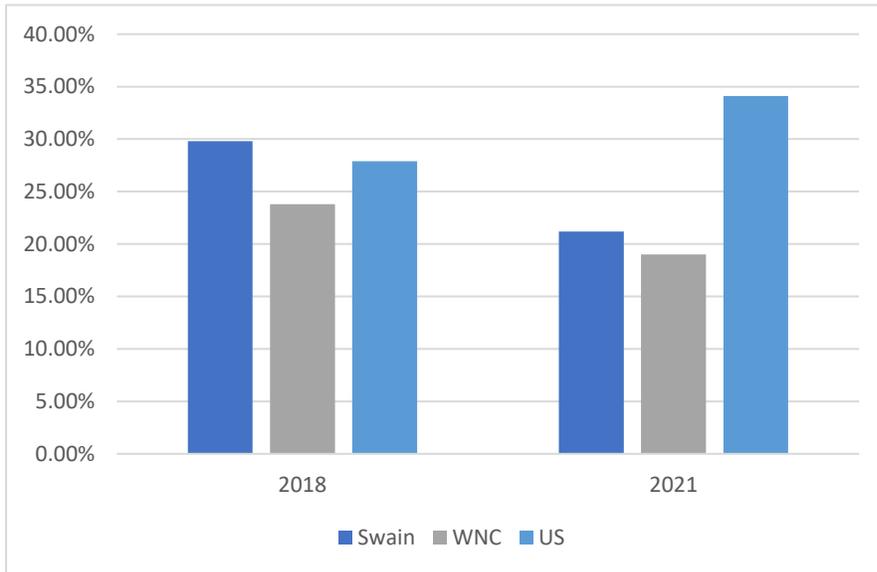
No Leisure-Time Physical Activity in the Past Month



As a part of the chronic disease/obesity/physical activity/nutrition priority, food insecurity was targeted as a subset to work on in Swain County. During 2021, 21% of Swain County reported worrying about running out of food before having money to buy more, which was a decrease from 2018 (view Figure 15). The food insecurity average in Swain County was above the regional average and below the national average. Essentially, 21% of our population is food insecure, which equates to roughly a quarter of the Swain County population, meaning that one in four residents are food insecure.

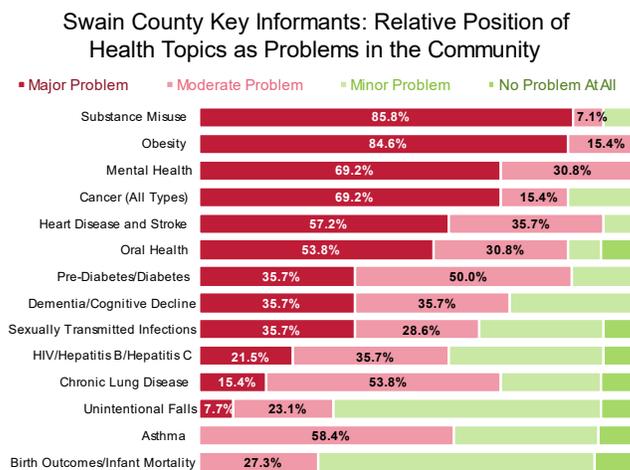
Figure 15.

Food Insecurity



Understanding the Issue

Key informants were given a list of chronic diseases and known factors that contribute to those diseases then asked to select up to three health concerns that are the most critical to address in Swain County. Residents indicated that obesity was one of the top priorities in the community.



When asked what is getting in the way of progress, key informants reported impedances of progress on these health conditions – “limited number of food outlets,” “there are becoming fewer areas in our community to actively workout. Our town is overcrowded, so are our parks and recreation. It would be nice to see a health care facility that had a pool, track, basketball courts, etc. for locals to join.”

Table 4: Ranking of Chronic Disease Issues as Critical to Address. *WNCHN – WNC Healthy Impact Community Health Survey, 2021.*

Fully evaluating this issue, we know it is difficult to adopt healthy behaviors if we do not live in a

conducive environment to promote success. Proper nutrition, physical activity, and health are closely related to obesity and chronic disease. These topics could be considered social norms and traditions as well as geography and the economy. In rural counties, there are limited well-paying jobs, high cost of housing resulting in commute, less money for groceries and recreation, and limited access to stores that sell nutritious food.

In relation to food insecurity, Manna Food Bank, The Giving Spoon, The Restoration House, and assistance from faith groups were listed as contributing to progress on this issue in our community. Key informants shared there are some good programs in Swain County to assist people in need. Further, many food insecurity services are stocked with prepackaged, unhealthy foods. Encouraging donators to provide healthier options could help those accessing the services have more opportunities to partake in better nutrition (WNC Health Network, 2021).

Although Swain County has an outdoor-friendly environment, a large percentage of the community does not have an active lifestyle. Hiking and bike riding are popular recreational activities and draw visitors into the county, however, less than a quarter of the community is participating in regular physical activity despite the environmental advantages the county has to offer.

Specific Populations At-Risk

All residents in Swain County can benefit from strategies that focus on chronic disease as it relates to obesity through physical activity and nutrition, the lives of at-risk populations may be greatly improved. According to the Centers for Disease Control and Prevention, non-Hispanic black adults had the highest prevalence of obesity (38.4%), followed by Hispanic adults (32.6%), and non-Hispanic white adults (28.6%; Petersen et al., 2019). Unfortunately, the CDC did not include Native Americans within this data, which is a large part of the population in Swain County.

Overall, men and women with college degrees resulted in lower obesity prevalence rates in comparison with those with less education (Centers for Disease Control and Prevention). Low-income and food-insecure residents within the county often do not have full access to grocery stores with nutritious options, are less likely to have their own mode of transportation, have greater availability to fast food restaurants, and live between deprivation and over-eating. Further, low-income residents typically live in neighborhoods with limited physical activity resources, are less likely to participate in organized sports, and do not have equal opportunity in physical education in comparison to students of higher-income schools. Those with limited resources are unable to access many of the opportunities available within the county for physical activity or sources of nutrition.

Health Resources Available/Needed

As chronic disease and obesity have been noted as health priorities from the 2009 CHA, many health resources are available to the community, however, as funding continues to diminish, the resources are limited. There is still a vast list of resources needed to fully combat this health priority in Swain County.

Available Health Resources		
Resource	Lead Agency	2021 Highlights
3D Mammography	Swain Community Hospital	Services continuing to grow in aiding chronic disease management
Telemedicine in Cardiology	Harris Regional Hospital	Added a new FNP to Harris Cardiology
The Ascent	Swain Community Hospital, Harris Regional Hospital, and Western Carolina University	The Ascent Partnership also features a community education component with a regular speakers' series highlighting experts from the university and the local hospitals, and it will be the foundation for the hospitals' ongoing support of the university's Valley of the Lilies Half Marathon and 5K, the Catamount athletics programs, and arts functions occurring on campus through WCU's Friends of the Arts organization.
Swain Summits	Swain Community Hospital, Swain County Health Department, and MountainWise	A community-wide wellness program with over 233 enrolled participants in 2019. Substantial pounds were lost and overall health improved.
Swain Summits	Swain Community Hospital, Swain County Health Department, and MountainWise	Free community health screenings, including blood glucose, cholesterol, blood pressure, body composition, and health score.

Food relief agencies	MANNA food bank, the giving spoon, the restoration house, and United Christian Ministries.	
Community Eligibility Program	Swain County Schools	
Home Delivered Meals	Swain County Schools	
Safe Routes to School	Swain County Health Department	
Food safety and cooking education	Cooperative Extension	

Needed Health Resources	
Resource	Potential Community Partner
Greenways/sidewalks	NC DOT, Commissioners, Greenways Committee
Gym facility accessible to all	Commissioners, Town Aldermen, Chamber of Commerce
Health education for youth	Swain County Health Department and Swain Community Hospital
Health education for parents	Swain County Health Department and Swain Community Hospital
Physical Activity Education	Swain County Health Department and Swain Community Hospital

Priority Indicator #2: Substance Misuse Prevention

In the 2015 CHNA cycle, the community identified substance misuse prevention as a health priority in Swain County. Since that time, a coalition was developed to focus on reducing substance misuse in the community among both adults and children. The coalition continues to focus on illicit drug use, alcohol, and tobacco. Moving forward, substance misuse prevention will remain at the forefront of community efforts.

Prescription drug abuse and overdoses are large issues to tackle. The community has been diligent in working on this priority through messaging campaigns, providing lock boxes, community presentations, medication take back events, medication drop boxes for the county, and much more. Harris Regional Hospital has deployed multiple continued medical education courses in hopes of reducing the prescription rate even more. In addition, Swain Community Hospital has been a continued conduit for conversations in the community about substance

abuse/misuse, specifically targeting information about community perceptions, wants, and needs.

Data Highlights

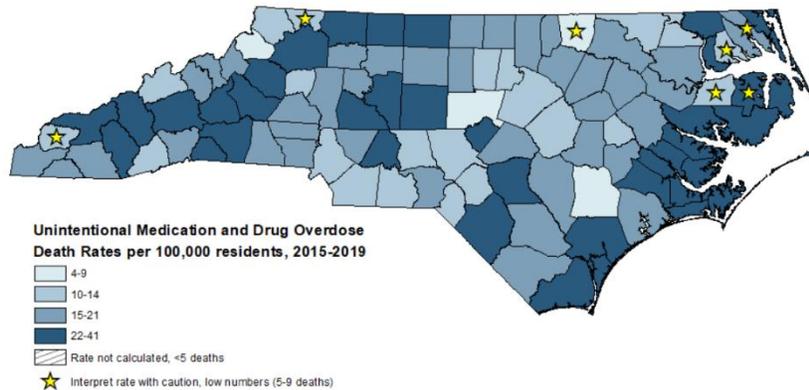
Health Indicators

Unintentional injury is included in all-cause mortality data, indicating that Swain County reported 42 deaths due to an unintentional injury in a single five-year aggregate from 2015 to 2019 (NC SCHS, 2020a). Unintentional injuries are accidental harm caused by oneself or someone else. For people 65 years or older, unintentional falls are the number one cause of unintentional death, however, individuals in the age category of 25-64 are more likely to report unintentional poisoning with substances at home.

Swain County's death rate due to unintentional injuries was 7% greater than the WNC regional average and 20% greater than the state average (WNC Health Network, 2021). It is important to note that the unintentional injury rate was much higher than the unintentional motor vehicle injury rate (13 deaths) as well as the suicide rate (13 deaths). The number one cause of death among the age group of 20 to 39 years was other unintentional injuries, followed by suicide and motor vehicle injuries, respectively.

Figure 17.

Unintentional Drug Overdose Death Rates by County



In 2020, Swain County had a high rate of opioid overdose ED visits per 100,000 residents. The number of unintentional opioid-related overdose deaths decreased from 20 in 2018 to 17 in 2019; however, the emergency department visits with an opioid overdose diagnosis increased dramatically from

2019 to 2020. In fact, 30 individuals were reported for an opioid overdose diagnosis in the Swain Community Hospital emergency department in 2020, which equated to a 210 rate per 100,000 residents. Oddly, the rate of opioid pills dispensed continues to decrease in Swain County, with approximately 22% of residents receiving opioid pills with a prescription. While the rate of prescription decreased year over year, 22% of residents receiving pills was astronomically higher than surrounding counties in the region. In 2019, 83% of overdose deaths involved an illicit opioid, which continues to increase across the region.

There were 56 community naloxone reversals in Swain County in 2020, doubling that of 2019 at 25 reversals.

Table 4.

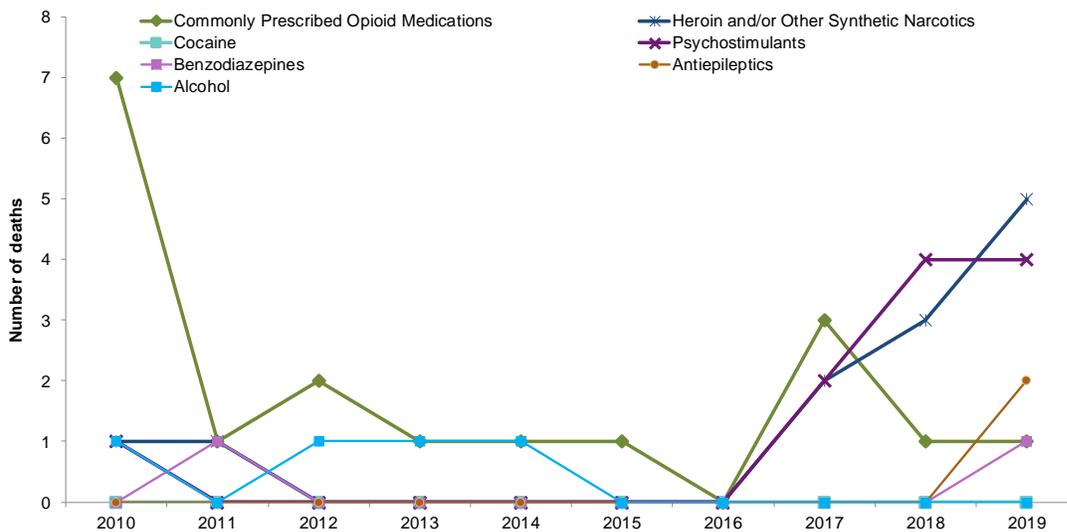
ED Visits with an Opioid Overdose Diagnosis

County	ED Visits with an Opioid Overdose Diagnosis			
	2017	2018	2019	2020
Swain	33	20	17	30

Swain County saw a dramatic increase in the number of deaths caused by heroin and other synthetic narcotics in 2019, with there being a fluctuation of overdose deaths related to heroin in the last four years. The community saw an increase in overdose deaths as a result of psychostimulants, benzodiazepines, and antiepileptics in 2019 (see Figure 19)

Figure 19.

Number of Deaths by Drug Category in Swain County



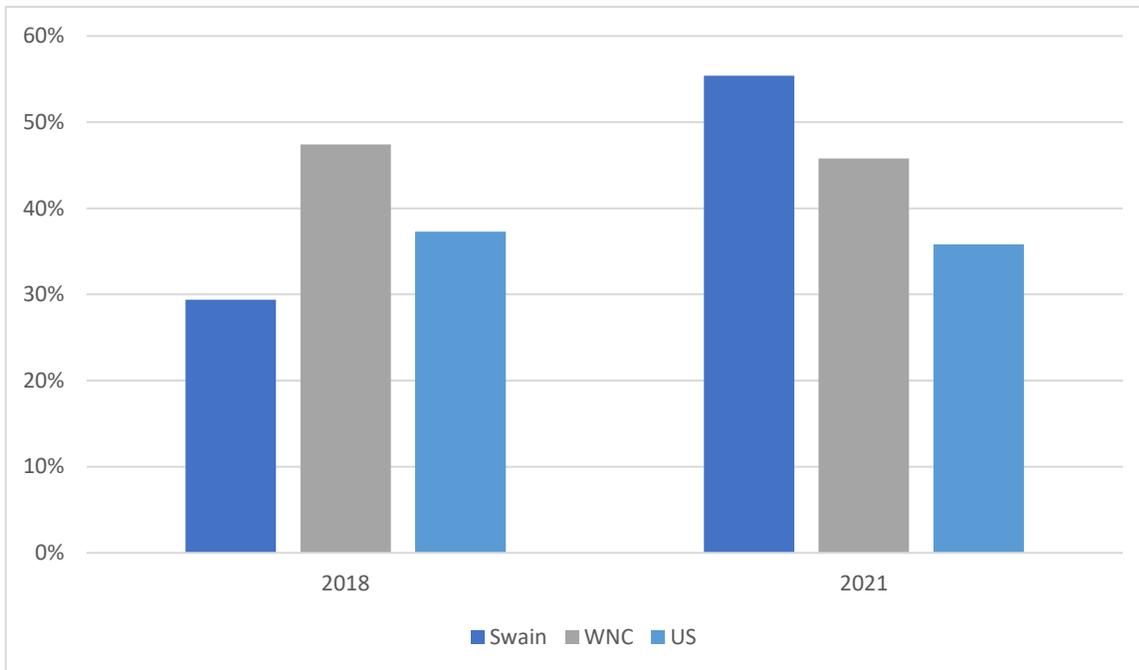
N.C. State Center for Health Statistics, Vital Statistics-Deaths, 2020.

In 2021, 19% of Swain County residents reported using opiates/opioids in the past year, with or without a prescription, which was a decrease from 2018 (26%). The percentage of residents using opioids in 2021 was well above the region and state (WNC Health Network, 2021). In contrast, over half (55.4%) of the residents in Swain County reported their life being negatively

impacted by substance abuse in 2021, which was an increase from 2018 (49%). The percent of residents in Swain County affected by substance abuse was greater than the regional average (46.5%) and the national average (35.8%). Substance abuse is clearly an issue for residents in Swain County, with one in two being negatively impacted.

Figure 20.

Life Has Been Negatively Affected by Substance Abuse



The top three leading causes of death in Swain County could be related to tobacco products. According to the CDC, smoking can cause heart disease, stroke, cancer, lung diseases, diabetes, and chronic obstructive pulmonary disease. During a pandemic, the COPD numbers significantly decreased from 2018 to 2021, creating a great quandary for the discrepancy year over year. In 2018, 22% of Swain County residents reported being diagnosed or having COPD, yet in 2021, 13% reported being diagnosed or suffering from COPD (WNC Health Network, 2021). It is unclear why there was a dramatic difference in three-years time. Further, the use of e-cigarettes was the lowest it has been since 2015.

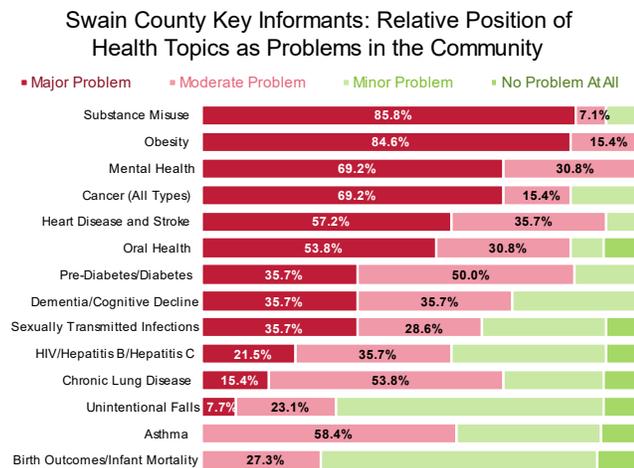
Swain County has continued to see a decline in the use of cigarettes. Since 2012, the percentage of current smokers has decreased by approximately 10%, with 18% of residents identifying as current smokers in 2021. For the first time in well over a decade, Swain County was similar to the NC and US averages for current smokers (WNC Health Network, 2021).

Similarly, the use of smokeless tobacco decreased as well as the use of vaping produces. This data provided clarifies that strategies to reduce tobacco use are working year over year.

The percent of current drinkers in Swain County increased from 2018 to 2021, with 43% of residents identified as current drinkers. The percentage of residents who identified as binge drinkers decreased from 2018 to 2021, however, those who identified as excessive drinkers increased. In 2015, roughly 10% of residents identified as excessive drinker, this percent stayed the same in 2018 and rose to 11% in 2021.

Understanding the Issue

Substance abuse was identified by key informants as the most critical. Reasons for identifying substance abuse as a problem include easy access to illegal substances, poverty, lack of treatment and support facilities, no mental health specialists in the area, minimal funding to combat the issue, not enough employment opportunities, “nothing to do” for youth, and lack of overall education. When asked to elaborate further, some agreed that recognition at the state and federal level that substance abuse is a mental health issue starting to trickle down into the local community (WNC Health Network, 2021).



Ranking of Substance Misuse as a Critical to Address.
WNCNH – WNC Healthy Impact Key Informant Survey, 2021.

Key informants shared, “drug use to be reduced, drug use goes down if the health of the people improves. Drug use in the county is high.” Another key informant stated, “the drug use of the parents in this area is high. Due to that children are abused a lot. Sex crimes on children is high in this area due to drug use.”

Another key informant also shared strengths about the community, “we are fortunate that several of our local and regional private healthcare institutions are owned and operated by an organization which has a vision and mission for community-based care. Their willingness to invest in, support, and expand services in the rural setting despite the inherent difficulties and risks is of critical importance to the success and maintenance of most of the health care service lines that are available in our communities.”

Cultural factors are becoming an increasing factor in regard to substance abuse. Consumption of alcohol, vaping/e-cigarettes, marijuana, pain killers, and anxiety medication is becoming more common and culturally acceptable. Swain County houses several shops selling CBD and vape products, specifically The Pied Piper on Main Street, Sylva Vapor on Main Street, Lola’s Vape Shop as well as a plethora of breweries.

Specific Populations At-Risk

Substance abuse affects all populations, but there are distinct differentiations between various groups in relation to substance misuse and abuse. The American Addiction Centers reported that Native Americans have the highest rate of substance dependence or abuse compared to other ethnic groups in the U.S. Further, Native Americans are reported to have the highest methamphetamine abuse rates compared to any other ethnic group in the country.

Other risk factors to consider would include:

- Socioeconomic status
- Family history of addiction
- History of chronic pain
- Mental health disorder
- ACE score
- Exposure to drugs earlier in life
- Poor social skills
- Availability/access
- High-stress environment

All low-income residents in Swain County were also at a greater risk for unintentional injuries, including overdose. Another population to consider would be pregnant women who use illicit substances as well as the babies delivered from these women.

Health Resources Available/Needed

Available Resources	
Resource	Lead Community Partner
Emergency Department	Swain Community Hospital
EMS Narcan Services	Harris Regional Hospital
Tobacco Treatment Program	Swain Community Hospital
Pain Management Clinics	Swain Community Hospital
Medication Take Back Events	Swain County Health Department
Permanent Drop Box	Swain County Health Department and Swain County Sheriff’s Office

Behavioral Health Services	Meridian Behavioral Health and Appalachian Community Services
Catch My Breath Program	Swain County Schools
Tobacco Prevention Efforts	MountainWise
Substance Abuse Prevention Efforts	Mountain Projects

Needed Health Resources	
Resource	Potential Community Partner
Substance abuse prevention programs for youth	Swain County Health Department and Swain County Schools
More local in-patient treatment centers and mental health services	Swain Community Hospital
Increase community awareness about available substance abuse/mental health resources	Swain County Health Department and Swain Community Hospital
Increased naloxone distribution	Swain County Health Department and Swain Community Hospital
Needle exchange program	Swain County Health Department, Swain Community Hospital, Commissioners, and Harm Reduction Coalition
Needle exchange boxes throughout county	Swain County Health Department, Swain Community Hospital, Commissioners, and Harm Reduction Coalition

Priority Indicator #3: COVID-19 Pandemic

The Swain County Health Department has selected the COVID-19 pandemic as a third priority for the 2021 CHA cycle. The COVID-19 pandemic has made a significant impact on death rates and chronic disease. While Swain Community Hospital acknowledges the importance of COVID-19 and supports the Health Department, the hospital will not be co-selecting COVID-19 as a third priority. Swain Community Hospital will continue to offer COVID-19 testing and treat COVID-19 patients in the emergency department, however, this will not be a CHNA priority. During the latest 2021 CHNA cycle, Swain Community Hospital will focus on chronic disease as it relates to obesity and substance misuse prevention, the two long-term priorities previously established in 2018.

Data Highlights

Health Indicators

During the 2021 CHA cycle, new questions were posed to participants to directly evaluate the impact of COVID-19 on each county in WNC. During the COVID-19 pandemic, roughly 22% of survey respondents in Swain County lost their job, compared to the regional average of 15%; Swain County had the greatest percentage of residents losing their jobs during the pandemic (WNCHN, 2021). Additionally, 26% of residents lost wages or hours during the pandemic, which was equal to the regional average. As over a quarter of residents lost their jobs, nearly 10% lost health insurance, which was greater than the regional average of 8%.

Specific Populations At-Risk

COVID-19 impacted everyone, however, those at greatest risk were the elderly population as well as minority groups.

Other risk factors to consider would include:

- Socioeconomic status
- Age
- Comorbidities
- Availability/access
- High-stress environment

Health Resources Available/Needed

Available Resources	
Resource	Lead Community Partner
COVID-19 Testing	Swain Community Hospital
COVID-19 Vaccine	Swain Community Hospital
COVID-19 Treatment	Swain Community Hospital
COVID-19 Testing	Swain County Health Department
COVID-19 Vaccine	Swain County Health Department
COVID-19 Testing	Urgent Care
COVID-19 Testing	Blue Ridge Health
Masks	Swain County Health Department
COVID-19 Testing	Walgreens
COVID-19 Vaccine	Walgreens

Needed Health Resources	
Resource	Potential Community Partner
More room for treatment options	Swain Community Hospital
COVID-19 vaccine available in Swain Family Care	Swain Community Hospital
Increase community awareness about available COVID-19 resources	Swain County Health Department



Health Resources

An inventory of available resources of our community was conducted through reviewing a subset of existing resources currently listed in the 2-1-1 database for our county as well as working with partners to include additional information. Where gaps were identified, we partnered with 2-1-1 to fill in or update this information when applicable. [2-1-1](#) is a free and confidential service that helps connect people across the country to the local resources that they need. Some examples of topics include emergencies and disasters, food, housing and utilities, human trafficking, and crises.

Health Resources Inventory

We conducted an inventory of available resources of our community by reviewing a subset of existing resources currently listed in the 2-1-1 database for our county as well as working with partners to include additional information. Where gaps were identified, we partnered with 2-1-1 to fill in or update this information when applicable. [2-1-1](#) is a free and confidential service that helps connect people across the country to the local resources that they need. Some examples of topics include emergencies and disasters, food, housing and utilities, human trafficking, and crises.

The county currently has two separate resource avenues for communicating resources with community members. The first is NC 2-1-1 and the second is a new Community Resource Meeting group.

NC 2-1-1 is an information and referral service that links people to community health and human services and maintains a database of community resources to support this service. NC 2-1-1 is free, confidential and available 24/7 to speakers of all languages. Resources are available through phone, web and iPhone app. The community tool (2-1-1) continues to serve as the updated resource list accessible via phone and web 24/7 – instead of your team compiling a printed directory. Our 2-1-1 datasets are reviewed every year by either the Health Department or the Region A Community Engagement Coordinator. In, May 2018, NC 2-1-1 provided a list of health resources available to residents of Swain County (even if they are located in another county) to the Swain County Health Department.

This listing includes the following information about each health resource:

- Agency name, program, description, address, website and contact information
- A program point person and their contact information
- Hours, provider language, fees, eligibility
- URL for the resource link on the NC 2-1-1 website

CHA team members reviewed the listing for completeness and encouraged additional agencies to add their information to the NC 2-1-1 directory in order to keep this resource current.

An email with the proper paperwork and contact information for updating or adding their resource to the NC 2-1-1 dataset will continue to be sent to all new members of the Community Resource Meeting group.

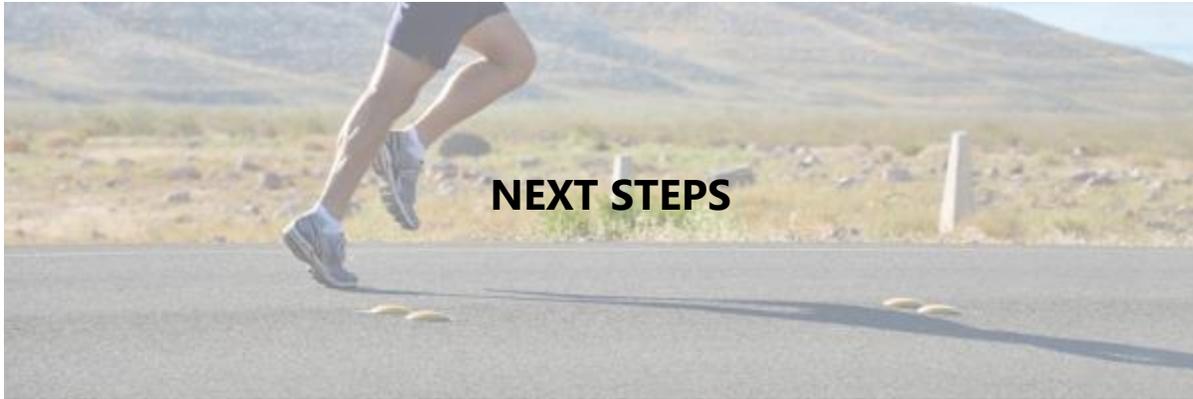
Learning the barriers of those in need. There are some programs offering free fresh fruits and vegetables, but community members do not use them. What else is needed for community members. – Public Health Representative

Findings

NC 2-1-1 - Many resources available to Swain County residents are actually located in other counties. For some, access to these resources (via transportation or phone) may be a barrier to receiving services. Some services that do exist in the county are not listed in the directory, and others have out-of-date information or are not described in a way that makes it easy to understand the services available and how to access them. Other services exist and are listed, but there is a perception

that those types of services are not available in the community. Additional education or promotion may be needed to make people more aware of existing services.

Community Resource Meeting group - The findings in 2018 showed a lack of communication among organizations that are providing resources. These findings coincided with the development of a new Community Resource Meeting, hosted by Swain County Department of Social Services held quarterly. The purpose of the meetings is to gather community partners to share resources offered, to better serve the citizens of Swain County. A roundtable discussion is held to inform of services, barriers, and solutions. The meeting group is currently working on a Social Media platform to inform not only other community resource partners of their services but the community members as well.



Sharing Findings

Our facility will post its CHNA report on the [Swain Community Hospital](https://www.myswaincommunity.com) website. The paper copy of our CHNA will be made available, upon request, at our hospital free of charge. Comments and suggestions from the public are welcome and may be submitted via the contact information on this webpage: <https://www.myswaincommunity.com/community-health-assessment>.

Collaborative Planning

Our hospital facility will participate in a collaborative planning process with our community partners which results in the creation of a community-wide plan at the county level. This plan outlines what strategies and related programs will be aligned, supported, and/or implemented to address the priority health issues identified through this assessment process. Our hospital will then develop a facility-specific implementation strategy that speaks to our specific contributions to the identified priority health issues. We aim to leverage existing assets, avoid duplication, and implement evidence-based and innovative efforts, that contribute to the community-wide effort to build a healthy and thriving place to live, work and play.

Date authorized by Chelsea Burrell, Ph.D., Wellness Manager, body of Swain Community Hospital facility.



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