

# 2022 HARRIS REGIONAL 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 Jackson County Health Department in collaboration with the Community Health Assessment (CHA) Action Team, Healthy Carolinians Steering Committee, WNC Healthy Impact, and Harris Regional Hospital produced and sponsored community health needs assessment (CHNA) in 2021.

#### **Community Health Assessment Process Leadership & Partnerships**

In Jackson County, leadership for the Community Health Assessment (CHA) process can be described as traditional, with the Jackson County Department of Public Health (JCDPH) as the responsible party. JCPDH collaborated closely with Harris Regional 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**

Jackson County's collaborative process is supported by WNC Healthy Impact, which works at the regional level. Locally, our process is supported by the CHA Work Team, the Healthy Carolinians Steering Committee, 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 10% of residents in Jackson County consume five or more servings of fruits or vegetables daily, and less than a quarter of the population is meeting the physical activity recommendations of 150 active minutes per week (WNC Health Network, 2021). Furthermore, 71% of residents are overweight or obese, which is a decrease from 2018 (77%). While the percent of residents identified as overweight or obese has decreased, the metric is still above the regional, state, and national averages. Approximately, 19% of respondents have been diagnosed with Diabetes in 2021, which is an increase from 2018 (12.1%; WNC Health Network, 2021).

Substance misuse increased during the pandemic. Roughly 55% of Jackson County residents indicated that their lives had been negatively impacted by substance misuse in 2021, and 3% misused a prescription drug within the past month of response (WNC Health Network, 2021). The use of cigarettes decreased from 2018, with 14% identifying as current smokers compared to 22% in 2018. Similarly, the use of vaping products also decreased. Although cigarette and vape use decreased, the use of smokeless tobacco increased, moving from 2.7% to 6.4% in three years. Furthermore, those who identified as excessive drinkers increased by 7% from 2018 to 2021.

Compelling evidence prompted the behavioral health priority; 66% of residents shared that the "always/usually" get needed social or emotional support, which is close to a 10% decrease from 2018 and is lower than the regional average (70%; WNC Health Network, 2021). Further, approximately 12% of respondents reported having considered suicide in the past year, which was the greatest percentage across the region, with the average being 8%. When asked about obtaining mental health services in the past year, 24% of respondents reported that they were unable to obtain needed help, which is above the regional and 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 Obesity/Physical Activity/Nutrition (with a special focus on food insecurity), Substance Abuse Prevention, and Behavioral Health.

#### **Next Steps**

In early 2022, the CHA Work Team 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. The CHA Work Team and Healthy Carolinians Steering Committee 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 Jackson County, selected by the community:

- Health Priority 1 Obesity/Physical Activity/Nutrition
- Health Priority 2 Substance Abuse Prevention
- Health Priority 3 Behavioral Health

The CHNA report was developed by Harris Regional Hospital in partnership with the Jackson 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 <a href="https://www.WNCHN.org">www.WNCHN.org</a>.





Chapter 1: Evaluation of Actions Taken Since Previous (2018) CHNA	<u>6</u>
Chapter 2: Community Health Needs Assessment Process	13
Purpose	13
WNC Healthy Impact	14
Data Collection Process	14
Community Input & Engagement	15
Acknowledgements	17
At Risk & Vulnerable Populations	20
Chapter 3: Jackson County	22
Location, Geography, and History of Jackson County	22
Physical Environment	23
Social and Economic Factors	25
Chapter 4: Community Served	30
Population	30
Community Served	32
Chapter 5: Health Needs in Our Community	33
Health Status & Behaviors	33
Health Issues	42
Priority Health Issues	45
Chapter 6: Available Resources	66
Chapter 7: Next Steps	68
References	69
Appendix	77
Jackson County Community Health Assessment	
2-1-1 Resource List	



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 brief 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, Physical Activity, and Nutrition		
<u>omm</u>		
Implementation Strategy Update		
Hospital Strategy	Evaluation/Note (Prioritize "How Well & Better Off" Measures)	
Hospital strategy 1:	How much did we do?	
	Tuesdays to Thrive is a community program through the Ascent Partnership sponsored by Harris Regional Hospital and Swain Community Hospital with Western Carolina University. The Ascent Partnership was founded in 2015 to provide ample opportunities to the community. The program Tuesdays to Thrive was hosted once a month in relation to different health topics in	

#### Tuesdays to Thrive

various venues. The events were open and advertised to the public throughout WNC.

# How well did we do it? Is anyone better off?

Tuesdays to Thrive averaged a dozen people in attendance per event. The event provided health education available to all community members, informing residents of Jackson County for them to make healthier life decisions.

#### Hospital strategy 2:

#### How much did we do?

\*\*Elevate 828 started in 2021, however, other similar programs were running in 2019 and 2020. These programs were only offered to Jackson County Public Schools employees or County employees.

Elevate 828 is a partnership between Harris Regional Hospital and the Jackson County Department of Public Health. This is a community-wide wellness program established based upon a program designed by the **CHNA Facilitator and Wellness** Manager. The program requires community health assessments twice a year, including total cholesterol, total glucose, blood pressure, body composition, and a health risk questionnaire. Elevate 828 was launched in 2021 amid the pandemic, however, we were able to provide over 10 community health screenings to the public, including Jackson County Public Schools. We ran over 150 blood tests in the community.



# How well did we do it? Is anyone better off? Elevate 828 has over 150 participants in one year, and actively strives to reach all entities and agencies in Jackson County. Employees from Harris Regional Hospital, Jackson County Health Department, Jackson County Department of Social Services, Western Carolina University, Jackson County Police Department, and various community members were all able to participant in the challenge. The goal of the program is to increase physical activity and nutrition, while decreasing stress. Hospital strategy 3: How much did we do? Harris Regional Hospital reinvigorated the Smoky Streak to Health in 2019. The Smoky Streak is a fun walk, 5K, and 10K event in Jackson County. The event hosted over 200 people within the first year, with all ages participating in the free event. EMS was in attendance as well **SMOKY STREAK** as orthopedics. EMS guided the runners along the path for safety and orthopedics provided free stretching assistance. How well did we do it? Is anyone better off? Smoky Streak to Health hosted over 200 people, with each of these individuals participating in the fun walk, 5K, or 10K. How much did we do? Hospital Strategy 4: The Jackson County Public School System employee wellness program, '4 The Health of It,' was established



after 2015 for the benefit of school employee health. The program included physical activity initiatives and challenges, nutritional education, as well as other various health education. This program ran until 2020, when Elevate and Elevate 828 came into the picture.

# How well did we do it? Is anyone better off?

'4 the Health of It' was able to provide health assessments to approximately a third of the employee staff twice a year. Not only are participants able to receive free health assessments including glucose and cholesterol but they are also given the opportunity to learn how to generate positive behavior change. Individual participants have lost up to 50 pounds during this program.

#### **2018 Priority Area 2**: Injury and Substance Abuse Prevention

#### **Population Level Data:**

Over half of Jackson County residents have been negatively affected by substance abuse, which is an increase from 2018. Approximately 55% of residents were negatively affected in 2021, which is greater than the regional and national averages. Additionally, 3% reported misusing a prescription drug in the past month, which is an alarming increase from .5% in 2018. The percentage of residents identifying as excessive drinkers dramatically increased from 2018 to 2021, with 20.5% of Jackson County residents stating they drink 4/5 drinks or more in one sitting within the last 30 days. The lack of mental health and substance abuse services present an ongoing need in our community. The increase in numbers of those served by Area Mental Health Programming and Alcohol and Drug Treatment Centers shows the importance of additional resources. From the key informant interviews and Healthy Carolinians meetings, the need for additional mental health and substance use resources has been reiterated time and time again.

#### **Collaborative Efforts:**

Through the emergency services at Harris Regional Hospital a focus is placed on substance abuse including the use of Narcan and specialized training to our EMT staff.



Implementation Strategy Update		
Hospital Strategy	Evaluation/Note	
	How much did we do?	
	Specialized training to our EMT staff on Narcan use and administration:	
	In 2016 we administered 22 Narcan kits.	
	In 2017 we administered 54 Narcan kits.	
	In 2018 we administered 37 Narcan kits.	
Narcan Distribution	In 2019 we administered 45 Narcan kits.	
	In 2020 we administered 50 Narcan kits.	
	In 2021 we administered 49 Narcan kits.	
	Is anyone better off?	

Our EMS Manager stated, "We have brought several people back from an unresponsive state or even cardiac arrest by using this medication."
The Narcan distribution and administration has saved lives in Jackson County – the people revived are certainly better off.



#### **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 workgroups 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.

**WNCHEALTHY** IMPACT Haywood 100 14 (5) 5 6 Graham (B) 3233 8 4 Clay Erlanger Murphy Medical Center (In Cherokee Indian Hospital Transylvania Regional Hospital Toe River Health District - Vancey Cherokee County Health Dept. **I** EBCI Public Health and Madison County Health Dept. RPM Health District-Polk Graham County Dept. of Public Health **Human Services** Buncombe County Health Saint Luke's Hospital Jackson County Dept. of Public Health and Human Services Clay County Health Dept. Toe River Health District- Mitchell Mission Hospital (B) Harris Regional Hospital Swain County Health Dept. Blue Ridge Regional Hospital Haywood County Health CarePartners Health Services 6 Swain Community Hospital @ RPM Health District- McDowel & Human Services Agency Park Ridge Health Macon County Public Health Center 3 Mission Hospital McDowell (15) Haywood Regional Medical Center Margaret R. Pardee Memorial Hospital 8 Angel Medical Center 32 Rutherford Regional Health System (I) Transylvania Public Health 2 Henderson County Department Highlands-Cashiers Hospital 3 RPM Health District- Rutherford of Public Health

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 Jackson 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**

Including input from the community is a critical element of the community health assessment process. Our county included community input and engagement in several ways:

- Recruitment of community members for the CHA Work Team
- Partnership on conducting the health assessment process with the CHA Work Team and Healthy Carolinians Steering Committee
- Through primary data collection efforts (surveys and key informant interviews)
- By reviewing and making sense of the data to better understand what the numbers mean
- In the identification and prioritization of health through a community meeting

In addition, community engagement is an ongoing focus for our community and partners as we move forward to the collaborative planning phase of the community health improvement process. We will continue to engage partners and stakeholders with current efforts or interest related to priority health issues. We also plan to work together with our partners to help ensure that programs and strategies in our community are developed and implemented with community members and partners.

#### Timeline:

- February 11<sup>th</sup>, 2021: CHA Work Group meeting #1
- March to June 2021 -- WNC Healthy Impact Community Health Survey (cell phone, landline, and internet-based survey) was conducted
  - o A random sample of 380 adults in Jackson County
- June 1<sup>st</sup>, 2021 WNC Healthy Impact Online Key Informant Survey began and left open for 3 weeks in 2021
  - o 29 individuals were listed
- April 20<sup>th</sup>, 2021: CHA Work Group #2
- August 18<sup>th</sup>, 2021 data workbook released to health departments and hospitals across WNC
- September 10<sup>th</sup>, 2021: CHA Work Team meeting #3
- September 22<sup>nd</sup>, 2021: CHA Work Team meeting #4
- September 29<sup>th</sup>, 2021: CHA Data Presentation shared with the Work Team for prioritization

No written comments were received on the previous plan. There is an opportunity to provide comments on the 2018 CHA and implementation plan on the Harris Regional Hospital website.

#### **Public Health Department**

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

In the collaborative assessment process for our community, the Jackson County Department of Public Health 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, 15 community stakeholders took part in the Online Key Informant Survey for Jackson County (see Table 1).

**Table 1.** *Key Informant Survey Participation* 

Local Online Key Informant Survey Participation			
Key Informant Type	Number Invited	Number Participating	
Community Leader		8	
Other Health Provider		2	
Physician		0	
Public Health Representative		4	
Social Services Provider		1	

Source: WNCHN - WNC Healthy Impact Community Health Survey, 2021.

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

#### **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 generalize or make statistical inferences from the sample to the entire population but to gather in-depth in

sights into health issues from a group of individuals with a specific perspective.

# **Acknowledgments**

Throughout the collaborative health needs assessment process in our community, input was obtained in several ways. See Table 2 for a list of all the organizations that provided input into this process, the period of time they were involved, how their input was obtained, and the nature and extent of their input.

Table 2.

List of Involvement in the CHNA Process

Name	Agency	Role/ Contribution	Agency Website
Anna Lippard	Department of Public Health	CHA Work Group	Department of Public Health
Chelsea Burrell	Harris Regional Hospital	CHNA Facilitator & Action Team Chair	Harris Regional Hospital
Cristian Mireles	Harris Regional Hospital	Action Team Member	Harris Regional Hospital
C.Y. Wang	Western Carolina University	Action Team Member	WCU Health and Human Sciences
Doug Keskula	Western Carolina University	Steering Committee	WCU Health and Human Sciences
Eddie Wells	Department on Aging	Steering Committee Chair	Department on Aging
Emily McClure	Cooperative Extension	CHA Work Group	Cooperative Extension
Ericka Zimmerman	Western Carolina University	CHA Work Group	WCU Health and Human Sciences
Jackie Moore	Department of Public Health	Action Team Member	JCDPH Safe Routes to School
Jake Buchanan	Jackson County Public Schools	CHA Work Group	Jackson County Public Schools
Janelle Messer	Department of Public Health	CHA Facilitator & Action Team Co- Chair	Department of Public Health
Jenifer Pressley	Parks and Recreation Department	Action Team Member	Parks and Recreation
Jessica Philyaw	Jackson County Public Library	CHA Work Group	Jackson County Public Library
Katherine Pincura	Western Carolina University	CHA Work Group	WCU Health and Human Sciences
Kelly Brown	Jackson County NAACP	CHA Work Group	Jackson County NAACP

Kelly Doppke	Jackson County Public Schools	CHA Work Group	Jackson County Public Schools
Laura Cabe	Jackson County Public Schools	Action Team Co- Chair	Jackson County Public Schools
Laura Passmore	Mountain Projects Head Start	CHA Work Group	Head Start
Marianne Martinez	Vecinos Farmworker Health Program	Steering Committee	Vecinos
Martha Thomasson	Department of Public Health	CHA Work Group	Department of Public Health
Melissa McKnight	Department of Public Health	CHA Work Group	Department of Public Health
Michele Garashi Ellick	Great Smokies Health Foundation	CHA Work Group	Great Smokies Health Foundation
Patsy Allen	Jackson County NAACP	CHA Work Group	Jackson County NAACP
Patti Tiberi	Mountain Projects, Inc	CHA Work Group	Mountain Projects
Rosalyn Robinson	Blue Ridge Health	Steering Committee	Blue Ridge Health Sylva
Sara Jane Melton	Area Agency on Aging	Steering Committee	Area Agency on Aging
Sara Stahlman	Parent	CHA Work Group	
Shelley Carraway	Department of Public Health	Steering Committee	Department of Public Health
Sheryl Williamson	Department of Social Services	CHA Work Group	Department of Social Services
Tracy Fitzmaurice	Jackson County Public Library	Action Team Member	Jackson County Public Library

# <u>Input of Medically Underserved, Low-Income, and Minority Populations</u>

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 III	
	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 not 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):

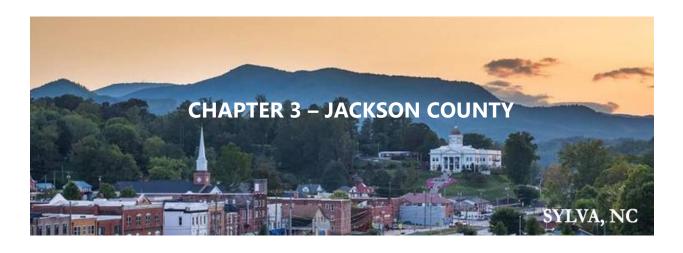
**Underserved populations** relate to those who do not access health care either because there is a lack of services or providers available or because of limitations such as income, literacy/language barriers or understanding on how to access services, cultural competency of clinicians, trust, transportation, 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 who 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 (8% in Jackson County)
- Below poverty level
  - 16.2% of White (83.1% identify as Caucasian/white)
  - o 45.4% of African American (2.2% identify as African American)
  - 15.8% of Natives (8% identify as Native American)
  - 41% of Asians (.7% identify as Asian)
  - o 43.9% of Hispanics (5.9% identify as Hispanic or Latino)
- Uninsured rate is 6.8% of residents in the county, which has decreased by roughly 8% in three years (WNC Health Network, 2021).

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 Jackson County**

Jackson County is located in the Southern Appalachian Mountains of Western North Carolina. Surrounded by the Blue Ridge Parkway and Great Smoky Mountains National Park, Jackson County consists of 494 square miles of mountains, rolling hills, and fertile valleys. Known for its varying geography, elevation ranges in the county from 2,000 to 6,000 feet above sea level. The county also boasts a vast amount of U.S. National Forest Land, primarily the Nantahala National Forest (Jackson County, 2021b). Notable geographic features of Jackson County include Richland Balsam, which is the Blue Ridge Parkway's tallest mountain peak at 6,410 feet, and Panthertown Valley, which has been described as the "Yosemite of the East." The Tuckasegee River flows 40 miles through the county and is a haven for trout fishing enthusiasts.

Jackson County is filled with natural beauty and the majority of the county is considered rural. There are endless opportunities for outdoor recreation such as hiking and water sports like fishing, boating, kayaking, and more. The rural landscape of the county can have a negative impact on residents by creating food deserts and can make transportation to-and-from necessary appointments very challenging. A sense of isolation from state lawmakers and inaccessibility to resources is a common issue in Western North Carolina, with Raleigh, the state capitol, being almost 300 miles from Jackson County.

Jackson County is shaped by the unique identities of its four main towns and several residential areas, each having its own rich history. Western North Carolina has been home to Indigenous people for thousands of years. When explorers came to the area in 1540, the Cherokee people began facing intrusion, fighting, enslavement, and a myriad of diseases that greatly impacted their lives (History, 2021). When President Andrew Jackson signed the Indian Removal Act in 1830, it began the Indian-removal process and eventually lead to the deadly Trail of Tears, which drove out tens of thousands of Cherokee and Native Americans from the southeastern United States and present-day Jackson County. The Cherokee people living on the Qualla Boundary today represent Cherokee people who escaped removal or relocated back to the area and officially became the Eastern Band of Cherokee Indians. Jackson County was founded in 1851 from parts of Haywood and Macon Counties, and was named for President Andrew

Jackson. Webster, the original county seat, was incorporated in 1850. The Western North Carolina Railroad (now the Great Smoky Mountains Railroad) was constructed through the town of Sylva, bypassing Webster. This ultimately increased Sylva's development and made it a prime location for the county seat, though the issue of relocation resulted in years of bitter dispute between Sylva and Webster representatives. The state legislature settled the dispute, giving Sylva permission to construct a courthouse and to pay the moving costs to relocate. The courthouse is now home to the Jackson County Public Library and is touted as the most photographed courthouse in the state. As the county seat, Sylva is the retail and professional center of Jackson County. Cullowhee is an unincorporated township that includes Western Carolina University and the surrounding businesses/residences designed to serve faculty and students. Dillsboro is a small village of shops and crafters, and was also a center of railway activity during the 1880s. The current Great Smoky Mountain Railroad attracts a significant amount of visitors to the Dillsboro area. The one-stoplight town of Cashiers sits at an elevation of 3,484 feet and serves the southern end of the county. Cashiers sees a boom in population and activity during the summer months with the affluent seasonal residents and visitors.

# **Physical Environment**

#### **Air & Water Quality**

"Clean air and safe water are prerequisites for health. Poor air or water quality can be particularly detrimental to vulnerable populations such as the very young, the elderly, and those with chronic health conditions. Clean air and water support healthy brain and body function, growth, and development. Air pollutants such as fine particulate matter, ground-level ozone, sulfur oxides, nitrogen oxides, carbon monoxide, and greenhouse gases can harm our health and the environment. Excess nitrogen and phosphorus run-off, medicines, chemicals, lead, and pesticides in water also pose threats to well-being and quality of life" (County Health Rankings, 2018).

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

- 109/113 days with good air quality
- 4/113 days with moderate air quality
- Small particulate matter was present at the level of pollutant on 113 of 113 monitored days (United States Environmental Protection Agency, 2020)

United States Environmental Protection Agency developed an ambient air quality trend for particle pollution — Particulate matter (PM). The term PM2.5 refers to fine inhalable particles, with diameters typically less than 2.5 micrometers. The county experienced 113 days when the air pollutant was at a PM 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). While the current average indoor radon level in Jackson County is 2.8 pCi/L (2 times the national average) there are counties in WNC with much higher levels (Facts about radon: Radon in Water; Radon and Geology, 2015).

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 10% of residents in Jackson County indicate that they have breathed someone else's cigarette smoke at work in the past week, which is a dramatic decrease from 2018 (WNC Health Network, 2021). It is important to note that this 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 Jackson County, over 50% of the county's 2021 population was served by community water systems (U.S. Census Bureau, 2021a). The remainder of the population access water from wells, directly from a body of surface water, or from bottled water.

#### **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 Jackson County, six grocery stores and four farmer's markets exist to serve over 40,000 residents. Close to 4% of residents live in a food desert, meaning that they live below the poverty level, have no car, and 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 close to 25% reported that this was often or sometimes true for them, which is a 6% increase 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 Jackson County, there are four public recreation and fitness facilities available to residents (U.S. Department of Agriculture Economic Research Service, 2021a).

#### **Social and Economic Factors**

As described by <u>Healthy People 2030</u>, 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.

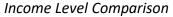
#### **Income & Poverty**

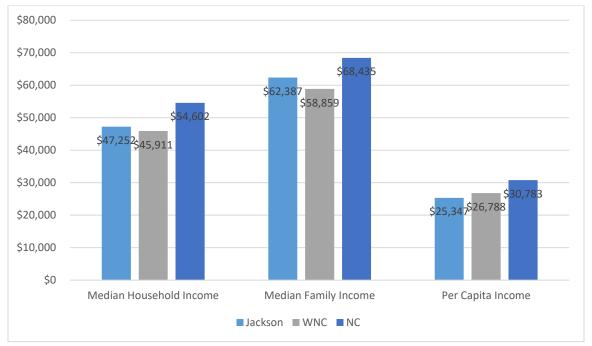
"People with steady employment are less likely to live in poverty and more likely to be healthy, but many people have trouble finding and keeping a job...In addition, many people with steady work still don't earn enough to afford the things they need to stay healthy" (U.S. Department of Health and Human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

As of November 2021, Jackson County remains a Tier 2 designation from the NC Department of Commerce. The Tier 2 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). Jackson County had a lower median household income, median family income, and per capita income compared to the state of North Carolina, though median household income and median family income were slightly higher than the WNC region (see Figure 2).

Each category has increased in Jackson County since the 2011-2015-time period. Jackson County's median household income is \$7,350 lower than North Carolina's median household income (U.S. Census Bureau, 2021g).

Figure 2.





Jackson 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 Jackson County was at 18.7% in 2019, compared to WNC (13.9%) and NC (14.7%). In Jackson County, WNC, and NC children suffer disproportionately from poverty (U.S. Census Bureau, 2021f). In Jackson County, 24.9% of children under age 18 and 28.8% of children under the age of 5 are living in poverty. Additionally, the Black/African American and Hispanic populations have higher rates of poverty than other minority and white populations (U.S. Census Bureau, 2021d). However, these rates have diminished since 2016, showing positive improvement in poverty rates.

#### **Employment**

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

- Educational Services: 21.4% of the workforce earn \$948 per week.
- Healthcare and Social Assistance: 15.2% of the workforce earn \$1,050 per week
- Accommodations and Food Services: 14.3% of the workforce earn \$433 per week.

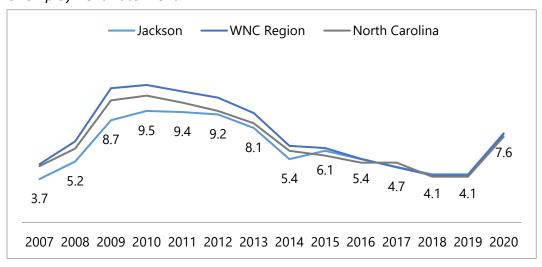
Take note of the gap in average weekly wages between the Educational Services sector and the Accommodation and Food section (a difference of \$515 per week; NC Department of Commerce, 2021). Persons working in the Accommodation and Food sector tend to lack employment benefits like health insurance and retirement programs. Additionally, many in this sector work part-time and often multiple jobs. This is a sector whose relative poverty leaves them vulnerable to emotional stress and poor health outcomes (NC Department of Commerce, 2021).

Throughout the period cited in the graph below (2007-2020), the unemployment rate in Jackson County was lower than comparable rates in the WNC region and the state until 2015, where the unemployment rate increased by less than 1%. Since 2015, the unemployment rate has been on a steady decline until the pandemic. In 2020, the unemployment rate significantly increased in Jackson County, reflecting the national trends due to the COVID-19 pandemic. The annual unemployment average in 2020 was 7.6%, which was a significant increase from 4% in 2019 (NC Department of Commerce, 2021). The unemployment rate reached the peak in May of 2020 at 17.5% and has slowly decreased. In March of 2021 the unemployment rate was 4.4%, returning to pre-pandemic numbers.

Due to the pandemic, 13% of Jackson County residents lost a job and 28% lost hours or wages (WNC Health Network, 2021). Although Jackson County was below the WNC average for jobs lost during the pandemic, 28% of residents lowing hours or wages was above the regional average and was the second highest average in WNC.

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 were 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). Jackson County has two opportunities for higher education within its community -- Western Carolina University and Southwestern Community College. Both colleges work closely with the community and encourage students to volunteer with events and projects.

Compared with the WNC region, Jackson County has:

- 1% lower percentage of persons in the population over age 25 having only a high school diploma or equivalent (U.S. Census Bureau, 2021b).
- 5% higher percentage of persons in the population over age 25 having a Bachelor's degree or higher (U.S. Census Bureau, 2021b).
- A lower overall high school drop-out rate for the 2019-2020 school year. The rate has decreased in Jackson County from 3.25 in the 2014-2015 year to .67 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 preterm 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 Jackson County than in WNC for most years from 2001-2019 (NC Department of Justice, 2021).

#### Housing

"The neighborhoods people live in have a major impact on their health and well-being" (USDHHS, 2021). Housing is a substantial expense. In fact, a measure of economic burden in a community is the percent of housing units spending more than 30% of household income on housing. In Jackson County, larger proportions of both renters and mortgage holders spend >30% of household income on housing than in WNC or NC (Financial Characteristics, 2019).

#### **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 Jackson County provides additional insight into the social/emotional support of county residents. When asked about social/emotional support, 65.6% of residents state they "always" or "usually" get the support they need. Unfortunately, this number has been steadily declining since 2012 (82%). Approximately 12% of Jackson County residents reported their typical day as being extremely or very stressful in 2021, and 84% reported feeling confident in managing the stress. Conversely, roughly 74% reported being able to stay hopeful in difficult times, which was close to 10% below the regional average (84.7%). Unfortunately, the percent of residents unable to obtain needed mental health services has been on a steady incline since 2012; in 2012 only 4% reported they were unable to get services needed but in 2021 the percent rose to 24%.



# **Population**

In 2019, 42,938 residents lived in Jackson County, which is a slight decrease from 2017. Many residents are Caucasian (83.1%) with minorities represented as follows: American Indian/Alaskan Native (8.0%), Hispanic/Latino (5.9%), African American (2.2%), and Asian (.7%) (U.S. Census Bureau, 2021a). Jackson County has a significantly larger proportion of American Indians and significantly lower proportion of African Americans and other minority groups than the WNC region and NC. The median age of Jackson County residents is 37.7 years – 9 years younger than the WNC regional average and 1 year younger than the NC average. Jackson County has the same proportion of younger persons (19% ages 5-19 years) and higher proportion of older adults (19.3% ages 65+) when compared to NC. Most residents reside in the northern portion of the county, particularly in Cullowhee around Western Carolina University.

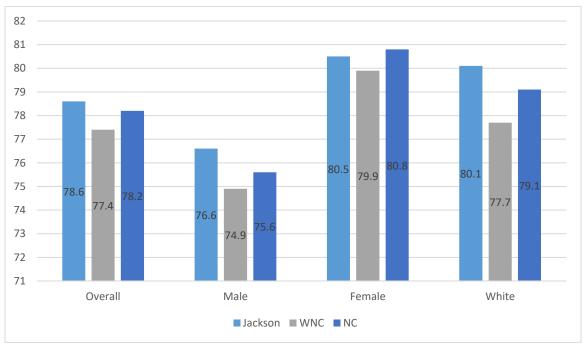
The birth rate in Jackson County has been on a steady decline (from 11.3 in 2006-2010 to 8.9 in 2015-2019), which is a trend seen in WNC and NC. Jackson County's birth rate is in line with WNC and lower than NC (NC SCHS, 2021g). In Jackson County, there are 16,773 households. In households where children are 18 years or younger, 12.2% of the households are headed by a married couple, 4.5% are headed by a single female, and 1.7% are headed by a single male. Additionally, 679 grandparents live with their grandchildren under age 18, and 35% of grandparents are also financially responsible for their grandchildren (U.S. Census Bureau, 2021e). Approximately 84% of grandparents responsible for grandchildren are identified as white, with 10% identifying as American Indian.

A new question was added to the community health survey in 2021, directly relating to homelessness. Less than 1% of Jackson County residents lived on the street, in a car, or in a temporary shelter in the past three years, which is well below the regional average (2.3%; WNCHN, 2021). With that being said, 5.3% reported having to live with a friend or relative in the past three years due to a housing emergency. 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 Jackson County, the overall life expectancy for residents is 78.6 years, which is above the regional average (77.4) but comparable to the 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 Jackson 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).

Cause of Death in 2020

Table 3.

		Jackson	
Rank	Cause of Death	#	Death
		Deaths	Rate
1	Cancer	422	148.3
2	Diseases of Heart	403	149.2
3	Chronic Lower Respiratory Diseases	139	48.6
4	All Other Unintentional Injuries	118	54.8
5	Cerebrovascular Disease	88	33.8
6	Diabetes Mellitus	69	27.4
7	Alzheimer's disease	69	26.3
8	Chronic Liver Disease and Cirrhosis	47	20.8
9	Pneumonia and Influenza	41	15.4
10	Suicide	38	17.6
11	Unintentional Motor Vehicle Injuries	30	13.9
	Nephritis, Nephrotic Syndrome, and		
12	Nephrosis	28	11.5
13	Septicemia	27	9.4
14	Homicide	8	
15	Acquired Immune Deficiency Syndrome	1	
All Cau	ses (some not listed)	1,989	759.2

Source: NC Center for Health Statistics, 2021.

Roughly 8% of the residents in Jackson County identified as Native American. As a portion of the Cherokee Indian Reservation is housed in Jackson 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**

Harris Regional Hospital's health information provided the basis for the geographic focus on the CHNA. The map below shows where Harris Regional Hospital received patients; most of the hospital's inpatients came from Jackson County. Specifically, approximately 1,703 in-patient experiences were residents who indicated they resided in Jackson County, which is roughly 42% of our patients at Harris Regional Hospital. It was reasonable to select the Harris Regional

Hospital as a primary focus of the CHNA due to 42% of inpatient activity traffic to the hospital is from Jackson County. Surrounding counties could benefit from efforts to improve health in the county.

The service area for Harris Regional Hospital 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 hospitals financial assistance policy.

Figure 5.

Harris Regional Hospital Patients – 2021



Source: 2018 Planning Service Area Definition. Casemix, 2018.

# **CHAPTER 5 -- HEALTH NEEDS IN OUR COMMUNITY**



#### **Health Status**

Data on the health status of our community <u>Jackson County</u>, and health factors that influence health are included in the full community health assessments for Jackson County linked above.

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

#### **Health Status & Behaviors**

In 2021, Jackson County was ranked 34<sup>th</sup> (out of 100 counties) in health outcomes, including—length of life, quality of life, and overall health rank. The ranking of county health factors was as follows:

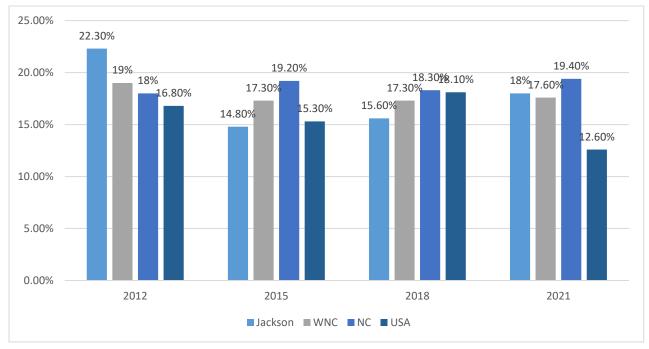
- Health Behaviors 29<sup>th</sup>
  - Includes adult smoking, adult obesity, physical inactivity, access to exercise opportunities, alcohol-impaired driving deaths, and more.
- Clinical Care 52<sup>nd</sup>
  - Includes uninsured, primary care physicians, dentists, mental health providers, mammography screenings, and more
- Social & Economic Factors 39<sup>th</sup>
  - o Includes high school graduation, unemployment, children in poverty, social associations, violent crime, and more.
- Physical Environment 87<sup>th</sup>
  - o Includes air pollution-particulate matter, drinking water violations, severe housing problems, and more.

Jackson County has improved in county health rankings since 2018, the county saw improvement in health behaviors, clinical care, and social and economic factors. In addition, the county remained the same in physical environment rating. The sub rankings of outcomes and factors created an increase in county health ranking, improving the overall health ranking in 2021. The opinions of residents were reflected in the county health rankings, as only 8.8% of residents reported the county as a "fair/poor" place to live, which was below the regional average (WNC Health Network, 2021). While the county appears to be seen as a quality place to

live, the health of residents declined since 2018. Unfortunately, 18% of residents stated they experienced "fair" or "poor" overall health in 2021, which is an increase from 2018. The overall health of residents in "fair" or "poor" physical health is close to the regional average (17.6%), below the NC average (19.4%), and well above the national average (12.6%).

Figure 6.

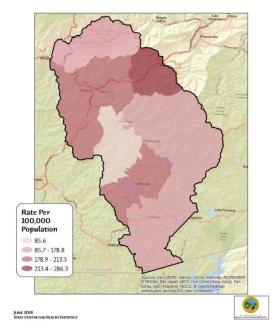
Experience "Fair" to "Poor" Physical Health



#### **Chronic Disease and Health**

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

Cancer is the leading cause of death in Jackson County, with colorectal, prostate, lung, and breast, being dominant in this community (NC SCHS, 2020b). Lung cancer incident rates have been steadily increasing since 2012-2016, whereas breast cancer incident rates have remained the same or decreased since 2012-2016 (NC SCHS, 2021b). Prostate cancer incident rates were on a steady decline until 2015-2019, when the first increase was seen in over a decade. Similarly, colorectal cancer incident rates have continued to climb since 2012-2016. Cancer incident rates appear to be on the rise among colorectal, prostate, and lung.



The second leading cause of death in Jackson County is cardiovascular disease, which includes heart attack, angina, or coronary heart disease. Roughly 6% of

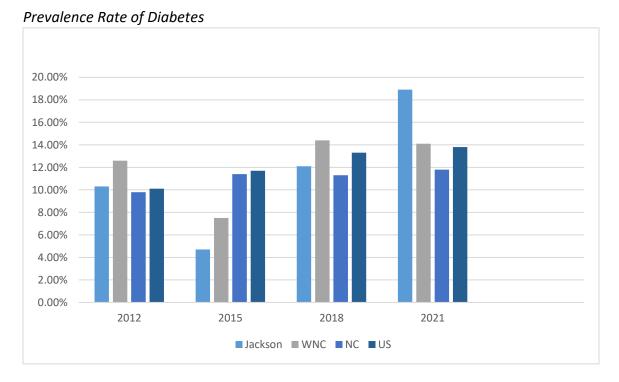
respondents to the survey indicated they had been diagnosed with cardiovascular disease in 2021, which is less than the WNC average (7.6%; WNC Health Network, 2021).

Fortunately, high blood pressure diagnoses have decreased by roughly 3% since 2018 (WNC Health Network, 2021 As we see blood pressure diagnoses decrease, we are also seeing maintenance of individuals in Jackson County taking action to control their high blood pressure. Roughly 89% of residents in the survey reported taking action in 2015, 2018, and 2021, which is slightly lower than the regional average (91%).

The third leading cause of death in Jackson County is Chronic Lower Respiratory Diseases. Approximately, 5% of Jackson County residents reported being diagnosed with Chronic Obstructive Pulmonary Disease (COPD), Bronchitis, or Emphysema in 2021, which is a significant decrease from 2018, where 15.9% 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 is also a prevalent topic within Jackson County in rural Appalachia. In 2018, 12.1% of residents reported having diabetes, which tripled since 2015 (4.7%; WNC Health Network, 2021). Unfortunately, the diagnosis of Diabetes has increased again since 2018, with 19% of residents reporting being diagnosed in 2021. The population with Diabetes in Jackson County is above the WNC average, and the continued elevation of diagnoses is extremely concerning.

Figure 8.

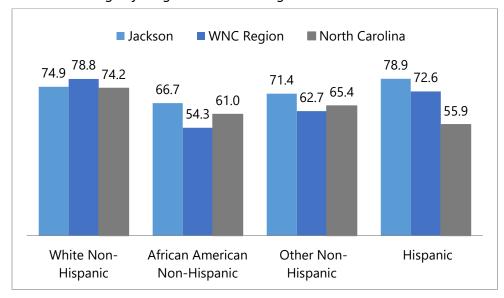


#### **Maternal & Infant Health**

The pregnancy rate among women aged 15 to 44 years has been on a steady decline since 2014 (NC SCHS, 2021g). In 2019, the pregnancy rate in Jackson County was 44 with a total of 410 pregnancies. The latest pregnancy rate (2019) was well below the regional average (62.5) and state average (69.6). The declining pregnancy rate trend should be noted in alignment with the upward trend of retirees vacating Jackson County. The population continues to reflect a growing age group of retirees.

The teen pregnancy rates have continuously declined since 2007. The pregnancy rate among women aged 15 to 19 years was 14.2 in 2019 (NC SCHS, 2021g). Jackson County has continued to be below the regional and state average for teen pregnancy. White non-Hispanic women were identified as the greatest group of teen pregnancies (18) in 2019, followed by American Indian women (5). Women receiving pre-natal care in the first trimester increased from 2018 to 2021, with 73.4% of women receiving needed care in Jackson County (NC SCHS, 2021a). In 2019, pre-natal care increased among "other non-Hispanic" and Hispanic women but not among white non-Hispanic or African American women. In fact, 79% of Hispanic women and 71.4% of other non-Hispanic women received needed care in 2019 (see Figure 9).

2019 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, Jackson County has declined in tobacco use during pregnancy. In 2018, 76 women reported smoking during their pregnancy and in 2019 50 women reported smoking. This is a significant decrease year over year (NC SCHS, 2021g).

The infant mortality rate in Jackson County has remained steady for the better part of a decade. Since the 2011-2015 year, the infant mortality rate has stayed between 7.3 and 7.9, which equates to 14 or 15 infant deaths per year (NC SCHS, 2021e). Unfortunately, this steady state, is above the regional and state averages. The regional infant mortality rate is close to 6 with the state average close to 7.

#### **Injury & Violence**

Figure 9.

The number of unintentional falls related to death among the elderly population has been steadily climbing since 2016, with the average of deaths related to falls being around 7 (NC SCHS, 2021d). There were three deaths in 2019 related to unintentional falls among those 85 years or older, two deaths among those 75 years or older, and two deaths among those 65 years or older.

# **Substance Use**

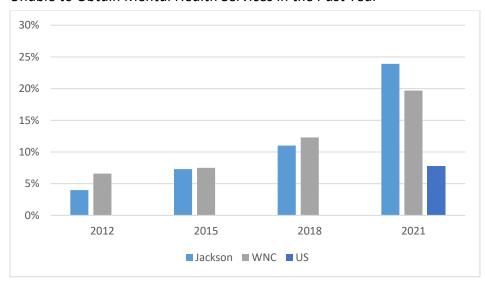
In 2019, there were eight unintentional opioid overdose deaths in Jackson County, which was below the regional average of 11 (NC Opioid Action Plan, 2021). In 2020, there were 42

emergency department visits with an opioid overdose diagnosis, which was a dramatic increase from 2019 (19). Further, the number of emergency department visits with an opioid overdose diagnosis in Jackson County were in alignment with the regional average of 44. While the overdoses were on the rise, the pills being dispensed continues to decrease. Since 2015, the percent of residents receiving opioid pills has decreased alongside the number of opioid pills being dispensed. In 2020, 4,702 opioid pills were dispensed and 10.7% of residents received opioid pills, compared to 8,002 pills dispensed and 19.4% 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, less than a quarter (20%) of residents' experience seven or more days of poor mental health in the past month, which is a decrease from 2018 (22.9%; WNC Health Network, 2021). In contrast, 65.6% of residents reported "always/usually" getting the social and emotional support that they needed, which was roughly a 10% decrease from 2018. In fact, there is a dramatic decrease among residents since 2012. In conjunction, 24% of residents were unable to get the mental health care needed in 2021, which was a 13% 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 Jackson County.

Figure 10.

Unable to Obtain Mental Health Services in the Past Year



### **Clinical Care & Access**

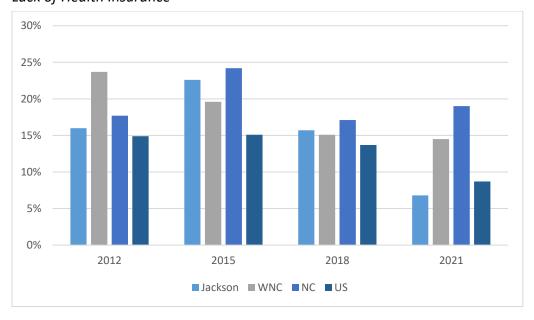
In 2021, roughly 14% of Jackson County residents reported they were unable to get needed medical care in the previous year (WNC Health Network, 2021). This was a dramatic increase from 2018, which was only 9% of residents.

The secondary data in 2017, communicated a high ratio of health professionals to the community served. The number of health professionals in 2019 in accordance with the number of active health professionals per 10,000 population ratio is as follows: 19 physicians, 6.3 primary care physicians, 3.2 dentists, 72.5 registered nurses, 3.6 physician assistants, and 10.8 nurse practitioners (Cecil G. Sheps Center for Health Services Research, 2021). The healthcare workforce in Jackson County was diminishing in 2019 prior to the COVID-19 pandemic, with the only increase in workforce being physician assistants and nurse practitioners. Roughly 29% of the dentists are over the age of 65, with the physicians closely behind at 21.4% (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 Harris Regional Hospital.

The percentage of Jackson County residents without health insurance has significantly decreased from 2018, with approximately 7% of residents uninsured compared to 16% in 2018 (see Figure 11). In 2021, Jackson County was below the regional, state, and national uninsured average, all during the COVID-19 pandemic.

Figure 11.

Lack of Health Insurance



In 2020, there were 9,165 individuals eligible for Medicaid in Jackson County, which equated to roughly 20.4% of the residents in Jackson County. Of those individuals authorized for Medicaid, the distribution is as follows: 3,220 Aid to Families with Dependent Children (AFDC), 1,603 infants and children, 1,096 disabled, 944 family planning, 577 aged, 38 foster care, 82 pregnant women, and 4 blind (NC Department of Health and Human Services, 2021b).

The licensed facilities reported are limited in Jackson County. There are only two licensed adult care facilities – Morningstar Assisted Living and The Hermitage (North Carolina Department of Health and Human Services, 2021a). The Morningstar Assisted Living has a max capacity of 55 residents, and The Hermitage has a max capacity of 90 residents. Tsali Care is located on EBCI Reservation and has a max capacity of 60 residents. Jackson County also has two nursing homes –Skyland Care Center and Vero Health and Rehab of Sylva. Skyland Care Center has a max capacity of 94 residents and the Vero Health and Rehab of Sylva has a max capacity of 106. Further, the county houses three home health establishments that collaborate to provide the best care possible – Harris Home Health, Harris Palliative Care and Hospice, and Home Care Partners.

Jackson County houses five licensed mental health facilities, however, only three out of five facilities have the capacity to board patients, and out of those three facilities they can only hold 15 patients (NC Department of Health and Human Services, 2021a). The need for expansive mental health services is on the forefront in the county. Residents of Jackson County indicated that 65.6% of the population surveyed felt they "always" or "usually" get needed social/emotional support when needed, which is a decrease compared to 2018 (WNC Health Network, 2021).

# Medically underserved, low-income, and minority populations

Jackson County residents who completed the survey indicated that roughly 15.6% are in "fair/poor" overall health, indicating health disparities (WNC Health Network, 2021. The county is predominantly comprised of Caucasian Americans, with well over half of the population identifying as "white" (83.1%). The next highest race and ethnicity identification within the county is Native American, and approximately 8% identify as Native American, which is 3,443 individuals. The highest level of poverty is seen among African American residents of the county, who make up 2.2 % of the population.

The low-income and underserved individuals are of the highest percentage among African Americans, Hispanics, and Asian Americans, both making up less than 10% of the population in Jackson County (U.S. Census Bureau, 2021h).

- Native American (8%)
- Below poverty level
  - 45.4% of African American
  - 43.9% of Hispanics
  - o 41% of Asians
  - 16.2% of Caucasian

#### 15.8% of Natives

During the 2021 community health assessment cycle, race and ethnic disparity questions were asked for the first time. Approximately, 13% of Jackson County residents reported feeling "often/sometimes" threatened due to race or ethnicity, which is above the regional average (9.7%). Further, a quarter (24.6%) of residents disagreed that the community is welcoming for individuals of all race and ethnicities, which is well above the regional average (16.8%; WNC Health Network, 2021). Similarly, roughly 17% of residents indicated they were often/sometimes mistreated due to race or ethnicity at school in Jackson County, which is well above the regional average (9%). In contrast, only 3.7% of residents reported being treated unfairly due to race or ethnicity when receiving medical care, which is below the regional average (4.5%).

Those unable to get needed medical care in Jackson County increased significantly from 2018 to 2021. Approximately 14% of residents reported they were unable to get the needed medical care in 2021 compared to 8.6% in 2018. The number of individuals unable to get care continues to increase, as only 4% were unable to receive care in 2015.

#### **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 the 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 socioculturally; Can identify easy, short-term wins)

Due to COVID-19, the methodology for prioritization had to change. The original two priorities remained the same, as they were intended to be long-term priorities. Due to the COVID-19 pandemic, a third priority was opened. The data was presented to various workgroups and discussed. From there, a survey monkey was disseminated for voting on a new priority.

#### **Identified Indicators**

During the above process, the CHA Action Team identified the following health indicators to present in the public meeting for a vote:

Obesity: A weight that is higher than what is considered healthy for a specific height.
 36.5% of the population in Jackson County reported being obese, which was a 5% decrease in 3 years.

- *Physical Activity*: Movement that is produced by skeletal muscles requiring caloric expenditure. Approximately 26% surveyed reported participating in no physical activity.
- **Nutrition**: Obtaining the recommended amount of nutrients within a day yielding positive health results. Only 5.5% of people surveyed indicated that they got 5 or more servings of fruits and/or vegetables in a day, which was a 2% decrease in three years.
- **Substance Abuse**: 12.4% of people surveyed reported using opiates/opioids in the past year in 2021 with (or without) a prescription, which was a decrease from 2018, and in conjunction, 55% reported their life being negatively affect by substance abuse, which was an increase from 2018.
- **General Mental Health**: Approximately 20% of respondents to the survey indicated more than 7 days of poor mental health in the prior month, which was a 3% decrease in three years. Further, roughly 24% of survey participants reported not getting mental health care or counseling that was needed in the previous year, which was a 13% increase.
- **Food Insecurity**: Jackson County's percentage of food insecure increased in 2021, with 25% being food insecure, compared to 19% in 2018. Jackson County food insecure rates are higher than the regional average (19%) but lower than the national average (34%).
- **Housing**: Housing costs above 30% of household income is steadily increasing in Jackson County. Approximately 9% of Jackson County residents had a time in the previous year without electricity, heating, or water, which was below the regional average of 11%.

# **Identified Priorities**

During the public meeting, these indicators were presented via powerpoint to the attendees. The attendees were then provided a worksheet indicating the three criteria – feasibility, impact, and relevance to the community. Following the worksheet, attendees from the community then voted using the dot vote method to narrow down the indicators to two priorities. The following priority health issues are the final community-wide priorities for our county that were selected through the process described above:

1. Obesity/Physical Activity/ Nutrition – Healthy eating and physical activity originally emerged as health priorities during the 2011 Community Health Assessment. While much community effort has occurred to combat these issues in the past decade, there is more work to be done. This priority was set to be a long-term priority with long-term initiatives. With the COVID-19 pandemic, food insecurity received many votes during the prioritization process. The CHA Steering Committee opted to make this a long-term priority due to work with the community-wide wellness program Elevate 828.

- 2. Substance Abuse Prevention Substance abuse originally emerged as a health priority during the 2011 CHA process as well. Topics identified during the prioritization process were:
  - a. Prescription drug misuse
  - b. Deaths with heroin/fentanyl
  - c. Youth tobacco use (e-cigarette emphasis)

In terms of feasibility, the increase of youth tobacco use with the popularity of e-cigarette products has become the main concern of public-school officials and families in Jackson County.

- 3. Behavioral Health Due to the negative mental health trends in Jackson County, this priority was unanimously voted into the current CHA/CHNA cycle. The COVID-19 pandemic placed a significant undue burden on residents everywhere, including Jackson County. Topics identified during the prioritization process were:
  - a. Access to mental health care
  - b. Children mental health school-aged children



# **Priority Health Issues**

# Priority Indicator #1: Obesity/Physical Activity/Nutrition

Physical activity and nutrition have been identified as a priority in Jackson County for over a decade. The priorities have been identified in a variety of formats, but the main principle has continued to be weight, activity, and nutrition. Prior to 2015, there were two separate action teams for physical activity and nutrition, however, after the 2015 community health assessment, the two action teams merged to form the CHA Action Team. As the two groups

merged, specific areas of focus also came to fruition – the goals of the group were and are to increase the number of adults who participate in 150 minutes or more of physical activity per week and increase the number of residents who consume 5 or more servings of fruits/vegetables per day. According to the primary data, the percentage of Jackson County residents who meet the recommended 150 minutes of physical activity was 23% in 2021, which was a slight increase from 2018 (WNC Health Network, 2021). Jackson County has seen a significant decrease in the percentage of residents consuming the recommended amount of fruits/vegetables, from 9.2% in 2015 to 7.3% in 2018 to 5.5% in 2021. These numbers are an indication that Jackson County needs to continue to work on fruit/vegetable consumption to aid in obesity prevention and healthy behaviors in our community. Harris Regional Hospital, the Jackson County Health Department, Jackson County Department on Aging, Jackson County Parks and Recreation Department, Jackson County Public Schools, Western Carolina University, Southwestern Community College, Jackson County Farmers Market, Great Smokies Health Foundation, and Jackson County Department of Social Services are a few of the agencies who have worked diligently to address these needs within the community and will continue to do so moving forward.

The Obesity/Physical Activity priority will also include obesity prevention and food insecurity as a subset. Obesity fits well with fruit/vegetable consumption as well as physical activity. Food insecurity prevention fits well with the groups identified above. The CHA Work Team and CHA Steering Committee, with input from the community, decided that Obesity/Physical Activity/Nutrition was still a prominent health issue in Jackson County and deserves to be at the forefront of our efforts.

# **Data Highlights**

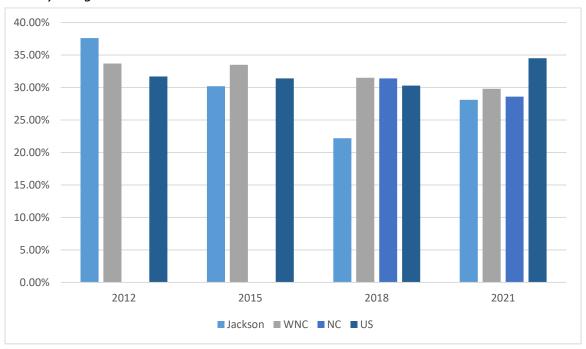
### **Health Indicators**

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 37% of Jackson County residents were considered obese in 2021, which was a 5% decrease from 2018. In conjunction, residents at a healthy weight increased from 22% in 2018

to 28% in 2021. These data points are showing positive trends for the strategies deployed over the previous decade.

Figure 12.

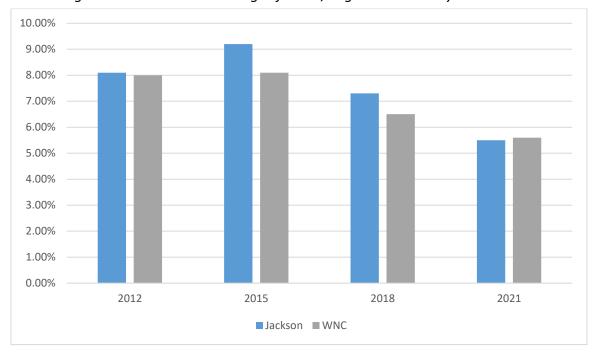
# Healthy Weight



Residents of Jackson 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. Traditionally, Jackson County has averaged a higher consumption rate of fruits/vegetables per day in comparison to WNC, however, the county and regional average are the same in 2021 (WNC Health Network, 2021).

Figure 13.

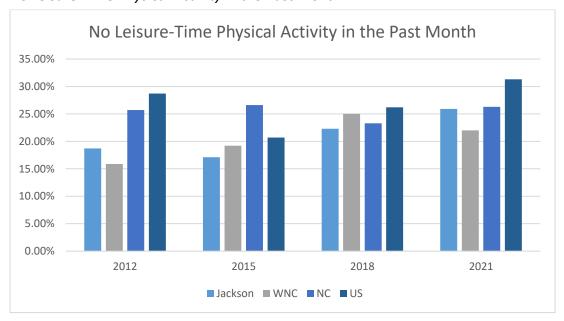
Consuming the Recommended Servings of Fruits/Vegetables Per Day



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 Jackson County residents surveyed reported meeting physical activity recommendations of 150 minutes or more of physical activity per week (see figure 14). Conversely, the percent of residents meeting physical activity guidelines per week increased by 1% in 2021. Participation in strengthening activities increased from 2018 to 2021, with 31% of residents participating in strength training in 2021. Jackson 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 back drop as well as 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.

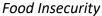
Figure 14.

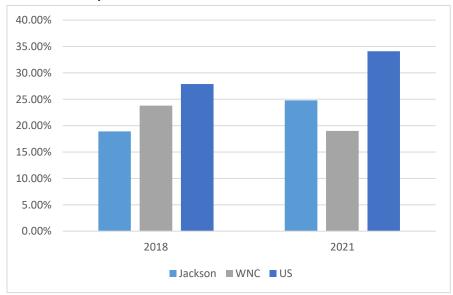
No Leisure-Time Physical Activity in the Past Month



As a part of the obesity/physical activity/nutrition priority, food insecurity was targeted as subset to work on in Jackson County. During 2021, almost 25% of Jackson County reported worrying about running out of food before having money to buy more (view Figure 15). The food insecurity average in Jackson County is above the regional average and below the national average. Essentially, 25% of our population is food insecure, which equates to a quarter of the Jackson County population, meaning that one in four residents are food insecure.

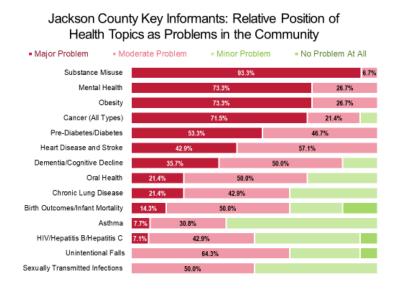
Figure 15.





### **Understanding the Issue**

Key informants were given a list of chronic disease 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 Jackson County. Residents indicated that obesity/nutrition/physical activity were the top priority in the community, followed by diabetes and heart disease. Further, during the key informant surveys, recreational/outdoor activities were ranked #2 as most important characteristic of a healthy community, followed by healthy lifestyles as #3.



Key informants reported many strengths associated with healthy behaviors such as, the WIC program, the **Diabetes Prevention** Program, the Jackson County Farmers Market, the Cullowhee Community Garden, the SNAP program, the greenway, and outdoor recreational spaces. A key informant responded to opportunities for physical activity by stating, "Robust County Parks and Recreation Department, quality recreation

programs...greenway and trails system, continued investment in recreational resources and open space conservation and preservation, support of pedestrian networks and support for expanding pedestrian networks, support for safe/active routes to schools programming."

When asked what is getting in the way of progress, key informants reported impedances of progress on these health conditions – "These communities do not have recreational resources in a close proximity to allow for daily, weekly, exercise opportunities." Cultural and community routines and ritual include unhealthy diet and lifestyle choices. Another key informant stated, "Food deserts and access to healthy food options, transportation, loss of farmland, and farmers that produce local food," as a key challenge to accessing affordable healthy foods in Jackson County.

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 Community Table, and assistance from faith groups were listed as contributing to progress on this issue in our community. Key informants stated that a lack of awareness on the issue and a better distribution system is needed to improve progress. 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 opportunity to partake in better nutrition (WNC Health Network, 2021).

Although Jackson 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, only a quarter of the community is participating in regular physical activity despite the environmental advantages the county has to offer.

Jackson County has a long-standing history of self-sustenance in producing family gardens for fresh herbs and vegetables. The county offers four reported farmers' markets, which is one of the highest offered in WNC. Although the county has several farmers' markets, eating out is an instinctual habit for the working-class families. The distinct "fast-food culture" developed as a result of long distances to and from work, lack of knowledge and education, and lack of income. Families stretching their grocery budget struggle with affording nutritious food or may not be able to travel to stores that sell nutritious items. Items provided in local food pantries typically are limited to shelf-stability, resulting in less nutritional value.

#### **Specific Populations At-Risk**

All residents in Jackson County can benefit from strategies that focus on obesity, 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 an at-risk part of the population in Jackson County.

Overall, men and women with college degrees resulted in lower obesity prevalence rates in comparison with those with less education (Ogden et al., 2017). 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 nutritious.

# **Health Resources Available/Needed**

As obesity, physical activity, and nutrition 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 Jackson County.

Available Health Resources		
Resource	Lead Agency	2021 Highlights
Harris Regional Cardiology Practice	Harris Regional Hospital	Added a new FNP to Harris Cardiology
Chest Pain Accreditation	Harris Regional Hospital	Accreditation as a chest pain center signifies the hospital has met nationally designated standards to provide resources for early heart attack care.
Harris Cancer Center	Harris Regional Hospital	Expanded in 2020 with an 8-million-dollar renovation to house the latest of radiation oncology technology.
The Ascent	Harris Regional 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.
4 the Health of It	Harris Regional Hospital and Jackson County Public Schools	Over 100 participants and close to 200 lbs lost in 4 months.
Discharged Patient Education	Harris Regional Hospital	Hospital staff, including Community Wellness Outreach Coordinator, are providing patients with physical activity and nutrition information specific to a CVD or COPD diagnosis upon discharge.
Elevate 828	Harris Regional Hospital and Jackson County Department of Public Health	A community-wide wellness program with over 100 enrolled participants. Over 100 blood screenings conducted on each participant. The program launched in August/September of 2021 and will run for six-months.
Diabetes Prevention Program	Jackson County Department of Public Health	Harris Regional Hospital providers and physicians refer to this program.
Power of Produce	Healthy Carolinians of Jackson County, Jackson County Farmers Market, WCU Dietetic Internship Program, Great Smokies Health Foundation	
Food relief agencies	The Community Table, United Christian Ministries, MANNA Food Bank	
Community gardens	Cullowhee Community Garden, Sylva Community Garden	
Healthy Snack Masters Competition	School Health Advisory Council	

Community Eligibility Program	Jackson County Public Schools	
Summer Feed Program	Jackson County Public Schools	
Home Delivered Meals	Jackson County Department on Aging	
Senior Games	Jackson County Parks and Recreation Department	
Arthritis Foundation Exercise Program	Jackson County Department on Aging	
At-school walking and biking programs	Active Routes to School, JCDPH	
Conning and food safety education	Cooperative Extension	

Needed Health Resources		
Resource	Potential Community Partner	
Additional greenways/sidewalks	Public Works, NC DOT, Commissioners, Greenways Committee, and Jackson County Parks & Recreation Department	
Additional recreation centers	Jackson County Parks & Recreation Department	
Nutritious food donations	Food relief agencies	
Healthy cooking classes	Jackson County Department of Public Health and Cooperative Extension	
Health education for youth	Jackson County Department of Public Health, Harris Regional Hospital, and Cooperative Extension	
Health education for parents	Jackson County Department of Public Health, Harris Regional Hospital, and Cooperative Extension	
Physical Activity Education	Jackson County Department of Public Health, Harris Regional Hospital, and Cooperative Extension	

### **Priority Indicator #2: Substance Abuse Prevention**

In the 2011 CHA cycle, the community first identified substance abuse prevention as a health priority in Jackson County. Following that Community Health Assessment process, an action team was developed to focus on reducing the percentage of 12-19-year-olds who reported use of an illicit drug, alcohol, or tobacco within the prior 30 days.

In 2018, the School Health Advisory Council conducted a youth tobacco and other drug use survey in Jackson County Schools to shed light on use among youth. From the youth data as well as the primary and secondary data, substance abuse prevention is still a top priority in Jackson County in the 2021 CHA cycle. Moving forward, substance abuse prevention will remain at the forefront of community efforts, with a special focus on youth prevention.

Prescription drug abuse and overdoes 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, the 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**

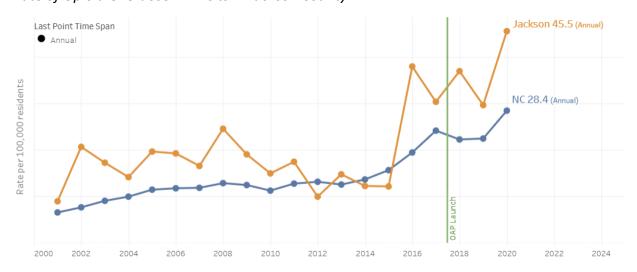
#### **Health Indicators**

Unintentional injury is included in all-cause mortality data, indicating that Jackson County reported 118 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 one's self 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.

Jackson County's death rate due to unintentional injuries is 8.1% greater than the WNC regional average and 39.4% greater than the state average (WNC Health Network, 2021). It is important to note that the unintentional injury rate is much higher than the unintentional motor vehicle injury rate (30 deaths) as well as the suicide rate (38 deaths). The number one cause of death among the age group of 20 to 39 years was other unintentional injuries, followed by unintentional motor vehicle injuries and suicide.

Rate of Opioid Overdose ED Visits in Jackson County

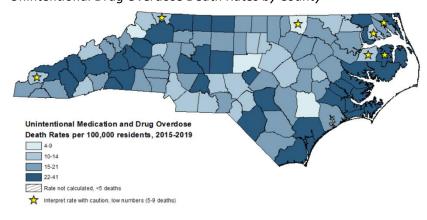
Figure 17.



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

Figure 18.

Unintentional Drug Overdose Death Rates by County



In 2020, Jackson County had a high rate of opioid overdose ED visits per 100,000 residents (see Figure 15). The number of unintentional opioid-related overdose deaths has decreased from 10 in 2018 to 8 in 2019; however, the emergency department visits with an opioid overdose diagnosis have increased

dramatically. In fact, the opioid overdose diagnosis doubled from 2019 to 2020, moving from 19 in 2019 to 42 in 2020. In 2019, 75% of overdose deaths involved illicit opioids, which was a decrease compared to 2018 (100%), 2017 (85.7%), and 2016 (80%). In contrast, the number of opioid pills being dispensed in Jackson County continues to decrease each year, with only 11% of residents receiving opioid pills in 2020, which was the lowest percentage compared to the region and state.

Jackson County reported 65 community naloxone reversals in 2020, which doubled from 2019 (30).

The emergency department visits with an opioid overdose diagnosis have dramatically increased in the last decade, with the peak being 2020.

ED Visits with an Opioid Overdose Diagnosis

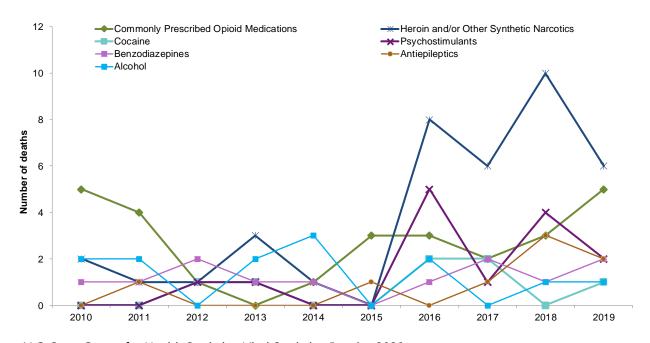
Table 4.

County	ED Visits with an Opioid Overdose Diagnosis			
	2017	2018	2019	2020
Jackson	30	32	19	42

Jackson County saw a dramatic increase in the number of deaths caused by heroin and other synthetic narcotics in 2015, with their being a fluctuation of overdose deaths related to heroin in the last four years. There has been an increase in deaths related to commonly prescribed opioid medications, benzodiazepines, and cocaine (see Figure 19)

Figure 19.

Number of Deaths by Drug Category in Jackson County

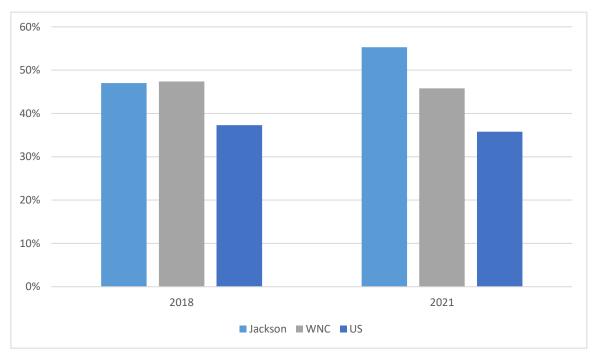


N.C. State Center for Health Statistics, Vital Statistics-Deaths, 2020.

In 2021, 12% of Jackson County residents reported using opiates/opioids in the past year, with or without a prescription, which was a decrease from 2018 (17.5%). The percent of residents using opioids in 2021 is like that of the region and state (WNC Health Network, 2021). In contrast, over half (55.3%) of the residents in Jackson County reported their life being negatively impacted by substance abuse in 2021, which was an increase from 2018 (47%). The percent of residents in Jackson County effected by substance abuse is marginally greater than the regional average (46.5%) and the national average (35.8%). Substance abuse is clearly an issue for residents in Jackson 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 Jackson 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, 16% of Jackson County residents reported being diagnosed or having COPD, yet in 2021, only 5% reported being diagnosed or suffering from COPD (WNC Health Network, 2021). It is unclear of why there was a dramatic difference in three-years' time. Further, the use of e-cigarettes was the lowest it has been at 5.7%, however, this was still above the regional and state averages.

Jackson County has continued to see a decline in the use of cigarettes. Since 2012, the percent of current smokers has decreased by approximately 12%, with only 14% of residents identifying as current smokers in 2021. Jackson County is on par for the regional average and below the state and national average for the first time in a decade (WNC Health Network, 2021). In contrast, the use of smokeless tobacco has increased from 2018 to 2021. In 2021, 6.4% of residents



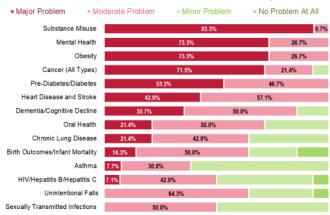
reported using smokeless tobacco compared to 2.7% in 2018. Jackson County is above the regional, state, and national average with smokeless tobacco users.

# **Understanding the Issue**

Substance abuse was identified by key informants as a 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).

Jackson County Key Informants: Relative Position of Health Topics as Problems in the Community



Ranking of Substance Misuse as a Critical to Address.

WNCHN – WNC Healthy Impact Key Informant Survey, 2021.

In Jackson County there is still a strong stigma

attached to substance abuse, indicated by harsh approaches towards those who are using. In opposition, we are also seeing professionals as well as community members taking the substance use issue very seriously.

In a listening session conducted with local law enforcement and EMS, noted Narcan to be a top contributor that was helping Jackson County with substance misuse. The availability of Narcan alongside educational opportunities afforded to Harris EMS and the Sylva Police have allowed for a better success rate regarding overdoses and substance misuse.

On the negative side, key informants also provided insight into perceived hindrances on progress with substance abuse prevention in Jackson County; many stated lack of sustainable funding as well as lack of resources, planning, and infrastructure. Several respondents indicated the need for more affordable rehabilitation centers as well as mental health services to help with every facet of addiction, which is something our region desperately needs. Further, the stigma of substance abuse lingers for those in treatment and/or recovery, making it harder for those to find jobs and housing. These responses are similar to those in 2018, demonstrating the continued need for assistance in this priority.

Key informants also indicated that tobacco dependency is a major issue for a large portion of residents in the county. Tobacco use is contributing to chronic disease and low quality of life. Jackson County has a few resources to aid – the Quit Line NC, the Tobacco Treatment Specialist at the Health Department, the Tobacco Treatment Specialist at Harris Regional Hospital, and lung cancer screening campaigns deployed by Harris Regional Hospital.

Cultural factors are becoming an increasing factor in regard to substance abuse. Consumption of alcohol, vaping/e-cigarettes, marijuana, pain killers, and anxiety medication are becoming more common and culturally acceptable. Jackson 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, Mountain Flora Dispensary, and Pinnacle Relief. The stores sell various CBD and vape products in the Jackson County area.

#### **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.

The 2018 National Survey on Drug Use and Health found that 10% of Native Americans have a substance use disorder, 4% have an illicit drug use disorder, 7.1% have an alcohol use disorder, and 29% reported drug abuse in the past year (American Addiction Centers, 2021). These numbers equate to 1 in 5 Native Americans aged 18 to 25 years as having a substance use disorder.

In 2018, the average demographics for overdose ED visits are as follows: 59% men, 75% white non-Hispanic, and 35% ages 25-34. The population at highest risk outside of Native Americans would be Caucasian men between the age of 25 and 34 (see below).

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 Jackson County are 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 (4 rooms available for psychiatric illnesses awaiting transfer)	Harris Regional Hospital	
EMS Narcan Services	Harris Regional Hospital	
Substance Abuse/Misuse Continued Medical Education	Harris Regional Hospital and MAHEC	
Tobacco Treatment Program	Harris Regional Hospital and Jackson County Department of Public Health	
Pain Management Clinics	Harris Regional Hospital	
Safe Kids Jackson County	Jackson County Department of Public Health	
Medication Take Back Events	Healthy Carolinians of Jackson County	
Permanent Drop Box	Jackson County Sheriff's Office in Sylva & Cashiers and Western Carolina University	
Behavioral Health Services	Meridian Behavioral Health and Appalachian Community Services	
Catch My Breath Program	Jackson County Public Schools	
Tobacco Prevention Efforts	MountainWise	
Substance Abuse Prevention Efforts	Mountain Projects	
Prevention Awareness and Education	Healthy Carolinians of Jackson County and School Health Advisory Council	

Managed Care Organization	Vaya Health
Student Support Specialists	Jackson County Public Schools

Needed Health Resources		
Resource	Potential Community Partner	
Substance abuse prevention programs for youth	Jackson County Department of Public Health and Healthy Carolinians	
More local in-patient treatment centers and mental health services	Harris Regional Hospital and Vaya Health	
Increase community awareness about available substance abuse/mental health resources	Jackson County Department of Public Health and Vaya Health	
Increased naloxone distribution	Mountain Projects, Healthy Carolinians, and Jackson County Department of Public Health	
Needle exchange program	WNC Harm Reduction Alliance, County Commissioners, Healthy Carolinians, and Jackson County Department of Public Health	
Needle exchange boxes throughout county	WNC Harm Reduction Alliance, County Commissioners, Chamber of Commerce, Healthy Carolinians, and Jackson County Department of Public Health	
Support for parents and families of those suffering from addiction	Harris Regional Hospital, Healthy Carolinians, and Jackson County Department of Public Health	

### **Priority Indicator #3: Behavioral Health**

In the 2018 CHA cycle, the community first noted behavioral health as an issue when discussing substance misuse as a priority. While behavioral health has been on the rise, it has not been made a priority until 2021.

# **Data Highlights**

#### **Health Indicators**

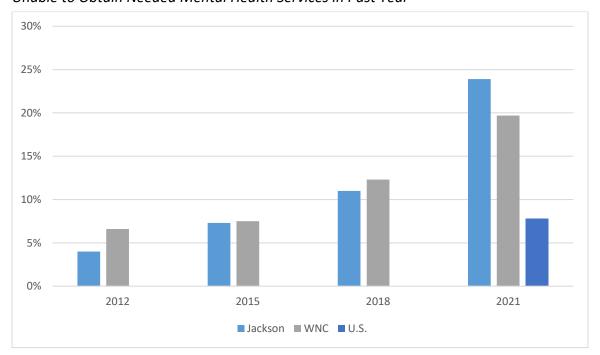
Jackson County residents have demonstrated a continual decline in receiving the social/emotional support needed in the last decade. Roughly 66% of residents reported "always/usually" getting the needed social/emotional support needed in 2021, which was a 8% decrease in three-years (WNC Health Network, 2021). The percent of residents receiving consistent social and emotional support was lower than the regional average of 70%. Further, only 74% of Jackson County residents reported they were able to stay hopeful in difficult times, which was roughly 10% below the regional average of 85%.

Inversely, the percent of residents who experienced more than seven days of poor mental health in the past month decreased from 2018. In 2018, 23% of respondents reported experiencing seven or more days of poor mental health in the past month compared to 20% in 2021 (WNC Health Network, 2021). In addition, this percent is lower than the regional average of 22%. Similar to these data points, 12% of residents reported their typical day as "extremely/very" stressful, which was below the regional (13%) and national (16%) averages.

While the data indicated an improvement in poor mental health days, this could be associated with the understanding that 26% of Jackson County residents were taking medicine or receiving treatment for mental health in 2021, which was higher than the regional and national averages (WNC Health Network, 2021). It was important to see 26% of the population receiving needed care for mental health as the reported suicidal ideation was 12% in 2021, compared to a regional average of 8%. Unfortunately, suicidal ideation was significantly higher than the regional average, and was greater than any other county in WNC.

The most alarming data point was the percent of residents unable to obtain needed mental health services in the past year. The inability to receive needed mental health care has steadily increased since 2012. In 2021, one quarter of the population could not obtain the needed mental health services in the past year, which doubled since 2018 (see Figure X).

Unable to Obtain Needed Mental Health Services in Past Year



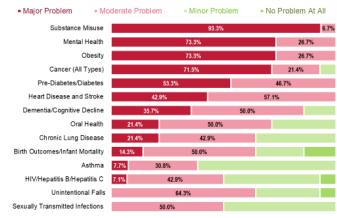
# **Understanding the Issue**

Figure 21.

Mental health was identified as the second biggest health problem in Jackson County, with 74% reporting it as a major problem and 26% reporting it as a moderate problem (see Figure X). Reasons for identifying mental health 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, and the COVID-19 pandemic.

In Jackson County there is still a strong stigma attached to mental health. In opposition, we are also seeing professionals as well as community members taking the mental health issue very seriously.

Jackson County Key Informants: Relative Position of Health Topics as Problems in the Community



Ranking of Mental Health Conditions as Critical to Address. WNCHN – WNC Healthy Impact Key Informant Survey, 2021.

### **Specific Populations At-Risk**

Mental health affects all populations, however, residents in Central Appalachia experience great disparity. Roughly 42% of the Central Appalachia population is rural, compared to 20% of the national population (American Psychiatric Association, 2018). The poverty rates in Central Appalachia are double that of the U.S. Further, Appalachians have significantly higher rates of mental health problems compared to the U.S. population (Marshall et al., 2017).

Central Appalachia has a 17% higher suicide rate than the national rate, and rural residents in Central Appalachia are 21% more likely to commit suicide than those living in urban areas (Marshall et al., 2017). Appalachian counties report greater numbers of mentally unhealthy days, which was correlated with unemployment, poverty, disability, and mortality rates, in addition to lower high school graduation rates.

Research also indicates that Native American populations have significantly greater rates of mental health issues compared to the rest of the U.S. population. The American Psychiatric Association (2017) conclude that Native American communities have greater rates of posttraumatic stress disorder, suicide, substance use disorders, and attachment disorders because of intergenerational historical trauma.

Other risk factors to consider would include:

- Socioeconomic status
- Education
- Geographic location
- Job status
- ACE score
- High stress environment
- Uninsured

All low-income residents in Jackson County are also at a greater risk for behavioral health issues.

# **Health Resources Available/Needed**

Available Resources		
Resource	Lead Community Partner	
Emergency Department (4 rooms available for psychiatric illnesses awaiting transfer)	Harris Regional Hospital	
Behavioral Health Services	Meridian Behavioral Health and Appalachian Community Services	

Prevention Awareness and Education	Healthy Carolinians of Jackson County and School Health Advisory Council
Managed Care Organization	Vaya Health
Student Support Specialists	Jackson County Public Schools

Needed Health Resources		
Resource	Potential Community Partner	
Behavioral health providers	Vaya Health, Meridian Behavioral Health, and Appalachian Community Services	
More local in-patient treatment centers and mental health services	Vaya Health, Meridian Behavioral Health, and Appalachian Community Services	
Increase community awareness about available mental health resources	Jackson County Department of Public Health and Harris Regional Hospital	
Support for parents and families of those suffering from behavioral health issues	Harris Regional Hospital, Jackson County Public Schools , and Jackson County Department of Public Health	

For more information about the community health priorities selected for Jackson County, read the Priority Issue sections in <u>LINK TO CHA</u>. In our facility-specific Implementation Strategy, we will discuss what role our facility will have in leading, collaborating on, or supporting others in responding to these health issues. The Implementation Strategy will be complete by <u>09/01/2019</u> and available to the public in September on the Harris Regional Hospital website as well as the Jackson County Department of Public Health website.



#### **Health Resources**

#### **Process**

The CHA Facilitator reviewed health resources in the 2-1-1 datasets provided by WNC Healthy Impact. The community tool, 2-1-1, continues to serve as the updated resource list accessible via phone and web 24/7 for Jackson County and Western North Carolina residents. The resources listed with 2-1-1 are updated and are available in place of the CHA Work Team or others compiling a printed directory. The United Way of North Carolina has taken on the task of regularly updating the 2-1-1 resource per county. Local groups also annually review the resources listed and submit updates as needed. These resources available to our residents can be found by visiting www.nc211.org or by simply dialing 2-1-1 or calling 1-888-892-1162.

#### **Findings**

In general, there are strong support services in the community for the aging population, even in the isolated Cashiers community, due to the Cashiers Senior Center. This is important, as Cashiers is known as a summer retreat for retirees. The Department on Aging works to identify needs of the older adult population and ensure they receive the support and guidance to assist them in accessing the resources. The Department on Aging is a crucial resource for the aging population. Additional local government resources available to the county include the Jackson County Department of Public Health, Animal Shelter, Department of Social Services, Emergency Management, Parks and Recreation Department, and more. Our community also provides quality resources for the uninsured and underinsured such as the Mountain Area Pro Bono PT Clinic, Blue Ridge Health FQHC, Nurse Family Partnership, and more.

Access to free, outdoor recreational opportunities was stated multiple times during the key informant interviews as a valuable resource in Jackson County. Even when residents do not have the funds to access a private gym, the Greenway Trail and other free outdoor recreational opportunities provide residents with the setting they need to be active (dependent upon weather).

### **Resource Gaps**

Based on a review of available resources and input from key stakeholders, resource gaps were identified that need to be filled in Jackson County. Below is a compiled list:

- **Affordable housing:** Few affordable housing options are available. Available housing is often unsafe, inadequate and still too expensive.
- Communication: Many agree that communication is key when helping others access resources. There may be resources available but communication between agencies is lacking.
- **Healthy foods:** Healthy food options are lacking in the form of grocery stores, farmers' markets, etc. Fast food is readily available and cheap.
- **Homeless shelter:** A long term plan for homeless shelter is a great need as the homeless population has increased significantly.
- **Internet access:** Limited internet access is a major problem for our area and leaves many rural residents out.
- **Mental health services:** Services such as housing and treatment facilities would help those suffering from mental health and substance use issues.
- **Spanish speaking providers:** Many providers use a language line which prohibits a positive medical experience.
- Access to health care (including subspecialty care): Residents have difficulty accessing
  healthcare due to a lack of providers, financial constraints, and more. Many residents
  travel out of county for subspecialty care such as neurology, endocrinology, urology, etc.
  Many residents do not have the means to travel and instead must go without getting
  the care they need.



# **Sharing Findings**

Our facility will post its CHNA report on the <u>Harris Regional Hospital</u> 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 contact information on this webpage: https://www.myharrisregional.com/for-patients-and-visitors/community-health-needs-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, Wellness Manager, body of Harris Regional Hospital facility.



American Addiction Centers. (2021). *Alcohol and Drug Abuse Among Native Americans*. https://americanaddictioncenters.org/rehab-guide/addiction-statistics/native-americans

American Psychiatric Association. (2017). *Mental Health Disparities: Appalachian People*.

file:///C:/Users/wolfp/Downloads/Mental-Health-Facts-for-Appalachian-People.pdf

Cecil G. Sheps Center for Health Services Research. (2021). *North Carolina Health Professions Data System*. [Data tables]. https://nchealthworkforce.unc.edu/supply/

Centers for Disease Control and Prevention. (2021, December). *Smoking & Tobacco Use*.

https://www.cdc.gov/tobacco/index.htm

County Health Rankings & Roadmaps. (2021). *Social Determinants of Health.*https://www.countyhealthrankings.org/

Eat Smart Move More. (2017). *Data on Children and Youth: NC-PedNESS.* [Data tables].

http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html

Farmers Market Coalition. (n.d.). *What is a farmer's market?* 

https://farmersmarketcoalition.org/education/qanda/
Indian Health Service. (n.d.) *Disparities*.

https://www.ihs.gov/newsroom/factsheets/disparities/

Indian Health Service. (n.d.). Health Promotion/Disease Prevention.

https://www.ihs.gov/hpdp/

Jackson County. (2021a, December). *County History*. https://www.jacksonnc.org/county-history
 Jackson County. (2021b, December). *Geography*. https://www.jacksonnc.org/geography
 Marshall, J., Thomas, L., Lane, N., Holmes, G., Arcury, T., Randolph, R. Silberman, P., Holding,
 W., Villamil, L., Thomas, S., Lane, M., Latus, M., Rodgers, J., & Ivey, K. (2017). *Health Disparities in Appalachia*. https://www.arc.gov/report/health-disparities-in-appalachia/
 Medicaid North Carolina. (2017). *Annual Report, Fiscal Year 2017*. Unavailable.

National Park Foundation. (n.d.). https://www.nationalparks.org/explore-parks/great-smoky-mountains-national-park

North Carolina Department of Commerce. (2021). *Demand Driven Delivery System: Quarterly*Census Employment and Wages. [Data tables]. https://d4.nccommerce.com/

North Carolina Department of Health and Human Services. (2021a). *Annual Report: N.C.*Medicaid Eligibility and Program Expenditures for Which the County is Responsible for Its

Computable Share. [Data tables]. https://dma.ncdhhs.gov/reports/annual-reports-and-tables

North Carolina Department of Health and Human Services. (2021b). Licensed Facilities, Adult

Care Homes, Family Care Homes, Nursing Facilities (by County). [Data tables]. https://www2.ncdhhs.gov/dhsr/reports.htm

North Carolina Department of Health and Human Services (2021c). Monthly Enrollment Counts

by County and Budget Groups. [Data tables].

https://dma.ncdhhs.gov/documents/reports/enrollment-reports/medicaid-and-health-choice-enrollment-reports

North Carolina Department of Health and Human Services (2021d). Opioid-Involved Overdoses.

[Data tables].

https://www.injuryfreenc.ncdhhs.gov/DataSurveillance/poisoning/OpioidFactsheet-FINAL.pdf

North Carolina Department of Justice. (2021). State Bureau of Investigation:

Crime Trends – Offenses and Rates per 100,000. [Data tables].

http://crimereporting.ncsbi.gov/

North Carolina Department of Public Instruction. (2021). Consolidated Data Reports:

High School Dropout Counts and Rates. [Data tables].

http://www.ncpublicschools.org/research/dropout/reports/

North Carolina Environmental Quality. (2021, December). Radon and Arsenic.

https://deq.nc.gov/about/divisions/energy-mineral-land-resources/north-carolinageological-survey/geologic-hazards/radon-arsenic

North Carolina Office of State Budget and Management. (2021). County/State

Population Projections. [Data table]. https://www.osbm.nc.gov/emog/county-projections

North Carolina Opioid Action Plan Dashboard. (2021). Metrics. [Data charts].

https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic-opioid-actionplan-dashboard

North Carolina State Center for Health Statistics. (2021a). *BABYBOOK: County Resident Births by Month Prenatal Care Began.* [Data tables].

http://www.schs.state.nc.us/data/vital/babybook2019.htm

North Carolina State Center for Health Statistics. (2021b). *Central Cancer Registry: NC Cancer Incidence Rates per 100,000 Population Age-Adjusted to the 2000 US Census*. [Data tables]. http://www.schs.state.nc.us/data/cancer/incidence\_rates.htm.

North Carolina State Center for Health Statistics. (2021c). County Life Expectancy at Birth:

County Health Data Book. [Data tables].

https://schs.dph.ncdhhs.gov/data/lifexpectancy/

North Carolina State Center for Health Statistics. (2021d). *Detailed Mortality Statistics, North Carolina Residents*. [Data tables]. https://schs.dph.ncdhhs.gov/data/

North Carolina State Center for Health Statistics. (2021e). *Infant Rates per 1,000 Live Births:*County Health Data Book. [Data tables].

https://schs.dph.ncdhhs.gov/data/vital.cfm#vitalims

North Carolina State Center for Health Statistics. (2021e). Race-Specific and Sex-Specific Age-

- Adjusted Death Rates by County: County Health Data Book. [Data tables]. https://schs.dph.ncdhhs.gov/data/
- North Carolina State Center for Health Statistics. (2021f). *Unintentional Poisoning Mortality*\*\*Rates per 100,000: County Health Data Book. [Data tables].

  https://schs.dph.ncdhhs.gov/data/
- North Carolina State Center for Health Statistics. (2021g). Vital Statistics: Pregnancy, Fertility, and Abortion Rates per 1,000 Population. [Data tables].

  https://schs.dpyh.ncdhhs.gov/data/vital/pregnancies/2019/
- North Carolina State Center for Health Statistics. (2020a). *Causes of Death.*[Data tables]. https://schs.dph.ncdhhs.gov/data/
- North Carolina State Center for Health Statistics. (2020b). *Death Counts and Crude Death Rates*per 100,000 Population for Leading Causes of Death. [Data tables].

  https://schs.dph.ncdhhs.gov/data/
- Ogden, C. L., Fakhouri, T. H., Carroll, M. D., Hales, C. M., Fryar, C. D., Li,

  X., & Freedman, D. S. (2017). Prevalence of obesity among adults, by household income and education United States, 2011-2014. *Morbidity and Mortality Weekly Report*.

  https://www.cdc.gov/mmwr/volumes/66/wr/mm6650a1.htm
- Petersen, R., Pan, L., & Blanck, H. M. (2019). Racial and ethnic disparities in adult obesity in the

  United States: CDC's tracking to inform state and local action. *Prevention Chronic*Disease. https://www.cdc.gov/pcd/issues/2019/18\_0579.htm

Pride Surveys. (2015). *Pride Surveys Questionnaire for Grades 6 thru 12 Executive Summary.* Bowling Green: Pride Surveys.

Professional Research Consultants, Inc. (2021). PRC Health Surveys.

- U.S. Census Bureau. (2021a). ACS Demographic and Housing Estimates: 2019

  ACS 5-Year Estimates. [Data tables]. https://data.census.gov/
- U.S. Census Bureau. (2021b). Educational Attainment: ACS 5-Year Estimates. [Data tables].

  https://census.data.gov
- U.S. Census Bureau. (2021c). Financial Characteristics for Occupied Housing Unites: 2015-2019

  ACS 5-Year Estimates. [Data tables]. https://census.data.gov
- U.S. Census Bureau. (2021d). Household Language by Household Limited English

  Speaking Status: 2019 ACS 5-Year Estimates. [Data tables]. Available from http://factfinder2.census.gov
- U.S. Census Bureau. (2021e). *Physical Housing Characteristics for Occupied Unites: 2015-2019*ACS 5-Year Estimates. [Data tables]. http://census.data.gov
- U.S. Census Bureau. (2021f). Poverty Status in the Past 12 Months: ACS 5-Year

  Estimates. [Data tables]. http://census.data.gov
- U.S. Census Bureau. (2021g). Selected Economic Characteristics: ACS 5-Year Estimates.

  [Data tables]. http://census.data.gov
- U.S. Census Bureau. (2021h). Selected Social Characteristics in the United States:

  2019 ACS 5-Year Estimates. [Data tables]. https://data.census.gov/

- U.S. Census Bureau. (2021i). Gross Rent as a Percentage of Household Income in the Past

  12 Months: ACS 5-Year Estimates. [Data tables]. http://census.data.gov
- U.S. Census Bureau. (2021j). Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income in the Past 12 Months: ACS 5-Year Estimates. [Data tables]. https://census.data.gov
- U.S. Department of Agriculture Economic Research Service. (2021a). Food Environment Atlas:

  Health and Physical Activity. [Data tables]. https://ers.usda.gov/FoodAtlas/
- U.S. Department of Agriculture Economic Research Service. (2021b). *Food Environment Atlas: Local Foods.* [Data tables]. https://ers.usda.gov/FoodAtlas/
- U.S. Department of Health and Human Services. (2021). *Healthy People 2030*.

  https://health.gov/healthypeople/objectives-and-data/browse-objectives#social-determinants-of-health
- U.S. Environmental Protection Agency. (2020). Air Quality Index Reports. [Data tables]. https://www.epa.gov/outdoor-air-quality-data
- U.S. Environmental Protection Agency. (2021). Safe Drinking Water Search

  For the State of North Carolina. [Data tables]. https://www.epa.gov/enviro/sdwis-search
- WNC Health Network. (2021). 2021 WNC Healthy Impact Community Health Survey:

  Data Workbook. [Data set]. https://www.wnchn.org/wnc-data/regional-data/
- WNC Health Network. (2021). 2021 WNC Healthy Impact Online Key Informant Survey.

  [Data set]. Unpublished data.

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Page 40 – Obesity/Physical Activity/Nutrition Photo – Courtesy of <u>www.pexels.com</u>; accessed April 15, 2019

Page 54 – Substance Abuse Prevention Photo – Courtesy of <u>www.pexels.com</u>; accessed April 15, 2019

Page 57 – E-cigarette Photo – Courtesy of www.pexels.com; accessed April 15, 2019

All other photos used are a curtesy of Harris Regional Hospital.



Appendix A – <u>Jackson County Community Health Assessment</u>

## Appendix B – 2-1-1 Resource Guide

## Jackson County 2-1-1 Guide

Agency Name	Description
Appalachian Mountain Community Health Centers	Primary care services for adults, 18 and older for acute and chronic care as well as preventive services such as health screenings and health education; behavioral health care including substance abuse services. Also provides enabling services such as outreach, and case management.
AWAKE Children's Advocacy Center	AWAKE coordinates a multidisciplinary team which reviews all abuse cases and through a collaborative effort, brings them to a resolution in the best interest of the child. Provides a child-friendly environment for children to be interviewed for suspected abuse by law enforcement or Social Service investigators.  AWAKE contracts with local counselors that have specific training in traumafocused counseling to provide counseling opportunities for children in a knowing and safe environment.
	AWAKE also provides education the community about child abuse and its prevention.
Barium Springs Home for Children	MHR provides outpatient and family services to youth and their families. They offer Support Groups, Enhanced Services, Diagnostic Assessment, Intensive In-Home, Community Support (Adult and Child), SAIOP Substance, Abuse Services, and DWI / DUI Services. Professional counselors, social workers, and certified/licensed specialists are on staff to provide assessments, individual therapy, group therapy, and family therapy.
Blue Ridge Free Dental Clinic	Community dental clinic offering routine cleanings and restorative care.
FCashiers Highlands Humane Society	Pet adoptions, also provides humane care and treatment for all dogs and cats needing temporary protection, promotes and subsidizes spay/neuter program. Hosts low-cost rabies vaccination clinics throughout the year.
Catch the Spirit of Appalachia	For children there are creativity workshops, and storytelling performance including creative writing and visual arts, within the public schools to provide self-esteem.  For adults there are classes in creative writing, improving personal appreciation, business workshops, opening doors to creativity and the festival of many colors.  There are also weekday-long summer camps available.
Communication	Diagnosis and collaborative intervention for children 0-5 years old with suspected Autism or related disorders.
Therapies Inc. Cooperative Extension Service	Cooperative Extension Service provides forestry management services and agricultural production information. Family education consists of parenting,

	nutrition and financial management. Youth Education Programs include 4-H
Council of	activities and clubs for children ages 9 - 19.  The Family Caregiver Support Program provides information and referral,
Governments Southwestern Commission Region A	access to services, caregiver training and support groups, respite vouchers, and supportive services for caregivers to assist them with providing the level of support their loved one deserves.
CRC of the Great Smokies	Offers awareness information and referral to services available in Haywood, Macon and Jackson counties; Assistance in making choices, and access to public and private aging and disability services.
Cullowhee United Methodist Church	Cullowhee United Methodist Church offers a Summer Day Camp experience for preschool and school aged children. Camp presents age appropriate opportunities and activities that enhance the child's spiritual, physical, social, intellectual, and emotional growth.
Disability Partners  – Sylva Office	People with disabilities are taught to be self-advocates who understand their rights under the Americans with Disabilities Act (ADA). Disability Partners advocates at local, state and federal levels for system changes to increase independent living services and equal access.
Fontana Regional Library	Children's story hours and summer reading clubs, displays of materials on community interest topics, books and other materials in a variety of subject areas and formats, including large print and audio visual, covering such subjects as business, science fiction, biography, children's and women's studies.
SHabitat for Humanity Macon/Jackson NC	Two Resale stores for the general public looking for furniture, appliances, household items, and building supplies.  Merchandise is sold at a reasonable price, and proceeds are used to build new Habitat houses and preserve existing homes.
Harris Regional Hospital	Harris Regional Hospital offers occupational health, home medical equipment, home infusion therapy, new direction weight loss and a cardiac program.
	Heart Phases Program serves western North Carolina.
	Mountain Tract Nursing Center has 100 beds.
Humane Society	Mountain Regional Cancer Center is located at 200 Asheville Road.  Offers animal services for Jackson County including animal adoption, foster
of Jackson County	care for animals, and spay/neuter services.
Jackson County Board of Education	Serves students with various disabilities in all grades, and between ages of 5 - 21.

_	
Jackson County	Provides local resource information, support and services to member
Chamber of	companies. Offers newcomer information to both businesses and residents.
Commerce	
	Also offers information about the area to tourists.
Slackson County	The Community Service Program provides community service placement for
SJackson County	court sentenced offenders. Intensive
Community	
Service Work	Probation is also in this location.
Program NC	
Department of	
Crime Control and	
Public Safety	
Public Salety	
SJackson County	Adult Wellness Screenings are available to anyone 18 years of age and older
Department of	who has an already established relationship with a physician. Test results from
Public Health	the screening will be sent to that physician.
	The Screening involves the following services: Blood pressure check, Height
	and weight check, Laboratory testing, Vision and hearing check, Cancer
	Screening
	A Cancer Screening is available to patients of the Jackson County Department
	of Public Health.
	The Screening involves the following: Skin, oral, and rectal exam, Breast exam,
	pelvic exam, and Pap test for Women, Prostate exam for Men.
	pervise exami, and rap test for women, rrostate examinor men.
	Other services offered are limited physicals, CDL physicals, BLET physicals, DOC
	physicals.
Jackson County	Allows eligible persons to remain safely at home instead of entering a nursing
Department of	home.
_	nome.
Social Services	There are three available types of CAP services:
	CAP/DA for adults with disabilities
	CAP/C for medically-fragile children under age 21
	CAP/IDD for children or adults with intellectual or developmental disabilities
Jackson County	The Day Care Program provides professional support and relief services to
Jackson County	older adults who are in need of daytime supervision and/or care. This support
Department of	includes individualized and group supervised programs, outings, activities,
Aging	
Jackson Count	lunch and snacks; as well as counseling and referral services.
Jackson County	This agency's mission is to build stronger individuals, families, and
Family Resources	communities through advocacy, empowerment, education and a respect for
Center	self and others. We hope to: empower families by helping parents cope with
	the stresses of daily life and
	improving their skills and capacities to support, guide and nurture their
	children, promote voluntary parental participation and ownership in programs
	without categorical restrictions on eligibility so that families do not have to
	present themselves as

	problematic or dysfunctional in order to receive services, provide a community-based, comprehensive, developmental approach to services that are culturally and socially relevant to the families we serve, link families with other formal and informal community services and support systems that can help meet their needs, ideally before the needs intensify and crisis occurs, and create a supportive network designed to enhance parents' child-rearing capabilities and to compensate for the isolation and vulnerability of many families by bringing them into contact with other parents in similar circumstance.
Jackson County Government	Responsible for disaster planning and response, as well as day to day development and review of emergency plans for the county. The emergency management staff is available to assist private businesses, industry, and government agencies in the development and implementation of their
	emergency plans. <u>CodeRED</u> is a type of reverse 9-1-1. This system allows Emergency Management the ability to deliver pre-recorded telephone notification/information messages to targeted areas, or the entire County concerning manmade, or natural emergencies.
Jackson County Soil and Water Conservation District	This agency provides landowners and land users assistance in erosion contril, implementation and maintenance of conservation practices.
Jackson County Transit	Jackson County Transit is a Public Transportation System which serves both Human Service Agencies as well as the General Public.
	Services offered include: Public Transportation, which includes an hourly shuttle service in the downtown area, Medicaid Trips in and out of Jackson County, Aging Transportaion, Child Daycare and Head Start services, Scheduled Transports to the Asheville Airport, and Veteran Medical Transportation.
Legal Aid of NC	Provides legal services for children in the public education system. Cases involve short and long-term suspension, expulsion, involuntary transfers to alternative schools, enrollment denials, mistreatment by school personnel, special education, bullying, and more.
Meridian Behavioral Health Services	Meridian is a non-profit Behavioral Health Services organization serving children, youth, and adults in the seven westernmost counties in NC.
	Programs available include an Assertive Community Treatment Team (ACTT) that ensures service availability 24 hours a day, seven days a week, Behavioral Therapy, Case Management, Community Support, CORE (Committed to Outreach, Recovery and Engagement), Long Term Care for adults with disabilities, Medical Benefits (for individuals and families with limited incomes who meet certain requirements), Outpatient Treatment for children and families in crisis, Outreach Programs, and Social Skills Education.

Morris Broadband	Offers internet, cable, and phone services.
Mountain Mediation Services	A voluntary alternative to court. Mediators act as neutral parties to help individuals listen to each other and clarify the issues involved. Mediation is used to resolve disputes through discussion in an attempt to reach an agreement which both parties feel is fair.
	<u>Mediation Programs include: </u> Community and District Court; Medicaid Appeals; Separation/Divorce; Youth Training and Restorative Justice; Group Facilitation.
NC Department of Juvenile Justice and Delinquency Prevention	Department of Juvenile Justice and Delinquency Prevention (DJJDP) juvenile court counselors supervise youth on probation.  The district court judge determines the length and terms of probation. Juvenile court counselors contact each youth on probation through telephone calls and letters monthly and visit every 30 days or less.
NC Department of Transportation – Division 14	The Right of Way Branch of the North Carolina Department of Transportation is responsible for the acquisition of all necessary lands and rights of way used for construction and improvements of all roads and highways which are part of the State Highway System. This includes roads on both the primary (Interstate, US, and NC routes) and secondary state road systems.
NC Works Career Center – Jackson County	Helps individuals find work, improve skills, and prepare for interviews. Services include career assessment, job listings and placement, resume preparation, practice interviews, computer and internet access, assistance with job searches, and more. Also offers special programs for veterans, former offenders, young adults (ages 16 - 24), and agricultural workers.
	Services include information on careers, help with developing a reemployment plan, referrals to workshops or training opportunities, and more. Can also provide additional information on how to file for unemployment insurance benefits.
North Carolina Assistive Technology Program	Provides assistive technology services to people of all ages and abilities. Make everyday activities easier and increase independence with assistive technology.
Region A Partnership for	Administers Smart Start funding and NC Pre-K funding in the seven western counties and the Cherokee Indian Reservation.
Children	Family Support Network of Region A provides support and resources to families of children with special needs such as parent-to-parent matching, referrals, and information. Hosts local support groups throughout Region A for parents or caregivers of children with special needs.

Southwestern	The College offers GED, vocational, technical, and continuing education
Community	training. Child care is offered for students, faculty and staff on campus.
College	
Speech and	The Western Carolina University Speech and Hearing Clinic provides
Speech and	
Hearing Clinic	diagnostic, treatment, and consultative services to citizens with known or
Western Carolina	suspected speech, language, and/or hearing disorders in Western North
University	Carolina.
	Also serves as a community resource for professionals and agencies requiring
	information about human communication and related disorders.
	In addition to traditional speech/language/hearing services, the SHC offers:
	Newborn Hearing Screening, Otoacoustic Emission Diagnostic Testing,
	Augmentative Communication Evaluation, Interdisciplinary Evaluation,
	assistance with assistive technology, and training on various topics related to
	communication disorders. Services provided by WCU students under
	supervision.
	supervision.
Success Oriented	SOAR features success-oriented, high adventure programs for youth ages 8-18
Achievement	diagnosed with a Learning Disability and/or ADHD. Emphasis is placed on
	developing self-confidence, social skills, problem solving techniques, and
Realized	more. Activities include back packing, whitewater rafting, rock climbing, horse
	packing, llama trekking, fishing, kayaking, SCUBA, and more.
The Community	Provides a hot meal and a food pantry to Jackson County residents.
-	Provides a not meal and a rood pantily to Jackson County residents.
Table	
The Diabetes Care	The Diabetes Care Clinic provides diabetes education, care and referral to low-
Clinic of Jackson	income individuals with diabetes who are uninsured.
County	The program provides diabetes self-management education and temporary
,	care for diabetes until a medical home can be secured.
	The clinic will provide low-cost testing supplies, laboratory testing at no
	charge, visits with a medical provider at no charge, and education classes at no
	charge.
The Good	The Good Samaritan Clinic (GSC) of Jackson County is a volunteer-based free
Samaritan Clinic	clinic that serves adults, with limited income, who are ineligible for Medicaid,
of Jackson County	and have no health insurance.
	Provides primary care and medication assistance to patients from Jackson,
	Swain, Macon, Graham, Clay, and Cherokee Counties.
Town of Sylva	The local agency that is responsible for enforcing all laws and ordinances;
	preventing crime; investigating criminal activity; apprehending, arresting and
	detaining suspects; presenting evidence; regulating traffic; investigating traffic
	accidents and engaging in other activities that protect lives and property and
	preserves peace in the community.
United Christian	Food pantry for the community.
Ministries of	When available, also has household items, personal care items, cleaning
Jackson County	products, clothing and furniture.
Jackson County	

US Post Office	Provides a variety of services that involve the shipments of mail and packages all over the world. Stamp centers, decorative packaging, and collectors' stamps are also available.
	<u>Additional Locations and their Phone Numbers:</u>
	Tuckasegee: 26 Canada Road, 28783 - 828-293-5074;
	Webster: 1345 Webster Road, 28788 - 828-586-5926;
	Whittier: 22 Main Street 28789 - 828-497-7627.
	There is no passport office in the county, the closest location would be downtown Asheville (828-271-6418)
Vehicle	Auto licenses must be purchased within 30 days of relocating to the state. Title
Registration NC	of car or name of lien holder, proof of insurance, and odometer reading are
Department of	required. Automobile must be inspected within 10 days from the date vehicles
Transportation –	are subject to registration.
Jackson County	To get a Permanent and Temporary Handicap Placard: Step 1. Requirements and Documents: Request form must be signed by a physician. Identification will be required for all services that are processed in person. Step 2. Submit Application and Fee for Each Placard (Limit 2 Per Person). Payment for transactions at DMV Offices are limited to cash, money order or personal checks. No other forms of payment are accepted.
	To get a Handicap Driver Registration Plate: Step 1. Requirements and Documents: Completing forms and follow the directions. Identification will be required for all services that are processed in person. Certification by a physician required. Signature of an authorized representative of the Division of Services for the Blind is also acceptable. Step 2, Submit Application and Fee for Each Plate. Payment for transactions at DMV Offices are limited to cash, money order or personal checks.  For more information, visit
	http://www.ncdot.gov/dmv/vehicle/plates/handicapped/default.html
Vocational Rehabilitation – WNC Regional Offices	Provides opportunities to persons who have mental or physical disabilities which prevent them from getting and keeping a job.  Depending upon an individual's eligibility and financial need, services include diagnostic evaluations, counseling, rehabilitation engineering, physical/mental restoration, limited transportation on a case to case basis, job placement assistance, and modifications to the vehicle/job/worksite.
Webster	Webster Enterprises provides vocational evaluation with situational
Enterprises	assessment for employment. Services offered are Supported Employment and
	work adjustment job coaching.