

Community Health Needs Assessment



2023





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CHNA LEADERSHIP

The 2023 Community Health Needs Assessment (CHNA) was conducted under the leadership of Rockcastle Regional's Community Relations Department. An internal steering committee was formed with a cross section of disciplines from across the organization. The goal was to identify common and unique challenges from throughout the community and align health improvement strategies for the organization to implement over the next three years.

COMMUNITY ENGAGEMENT

Community engagement is a key component of assessing and responding to community health needs. Feedback was obtained from community leaders, public health officials, advocacy agencies, community business representatives, educators, leaders from community civic organizations, and healthcare professionals, both from within Rockcastle Regional and from other healthcare and community organizations. This input was invaluable as it provided a variety of perspectives of the health status of the community and highlighted health disparities among the underserved population.

METHODOLOGY

The 2023 CHNA research included qualitative primary source research methods and secondary sources to determine health trends and disparities affecting the residents of Rockcastle County. The steering committee used a priority ranking system to create the 2023 CHNA community survey, which was disseminated throughout the community. After all survey data was obtained, the steering committee reviewed and analyzed that data, along with the secondary source data, and through a series of ranking exercises, developed a profile of priority areas to best address the health disparities identified. This profile will guide the organization's healthcare services and improvement efforts over the next three years.

The following research methods were used:

- An analysis of secondary data sources, including public health statistics, publicly available census data, and healthcare
 utilization data from the state and national hospital associations.
- A community survey, which was available by both paper and electronic means. A paper copy was mailed to every household
 and post office box in Rockcastle County. The electronic version was made available on the hospital's website and social media
 platforms, as well as promoted throughout the community through a QR code.
- A stakeholder survey was electronically disseminated to community, business, public health, civic leaders, and educators throughout the community. It was also made available to leaders within the organization, as well as direct care providers in both the inpatient and outpatient settings.
- A provider survey was electronically shared with the healthcare providers from within the organization, as well as to those from other healthcare provider organizations within the community.



PRIORITIES IDENTIFIED

The following health priorities were identified by the steering committee as those where the organization can best address the health disparities in the community over the next three years:

Priority 1: Mental Health and Substance Use

Priority 2: Physical Activity and Obesity

Priority 3: Caring for Aging Adults

An implementation strategy was developed by the steering committee as a tool to guide the organization over the next three years in addressing health disparities and promoting a community culture of health equality and inclusivity and affecting a positive change on the health outcomes for the residents of Rockcastle County.

BOARD APPROVAL

The RHRCC Board of Directors adopted this CHNA and accompanying Implementation Strategy on March 15, 2024.



About Community Health Needs Assessment

PROJECT OVERVIEW

In 2010, Congress enacted the Patient Protection and Affordable Care Act that requires non-profit 501(c)3 hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt an implementation strategy every three years. This CHNA is a systematic, data-driven approach to determining the health status, behaviors, and needs of residents in the service area of Rockcastle Regional Hospital and Respiratory Care Center (RHRCC).

A CHNA provides information so that communities may identify issues of greatest concern and decide to commit resources to those areas, thereby making the greatest possible impact on community health status.

Included in this report are:

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This CHNA was conducted by the Community Relations Department within RHRCC, who worked collectively with an internal Steering Committee. The committee's goals were to:

- 1. Evaluate the organization's prior CHNA Implementation Strategy (2019) and its effectiveness.
- 2. Develop survey tools for the 2023 CHNA to understand and address unmet needs within the county.
- 3. Design a survey dissemination strategy to gather feedback from the community at large, those with special knowledge of or expertise in public health, and healthcare providers within the county.
- 4. Analyze both primary and secondary source data and determine priority areas for the organization to address the unmet health needs of the community.
- 5. Develop an Implementation Strategy to achieve those priority goals.

About Community Health Needs Assessment

Primary data was collected through:



Secondary data from local, state, and federal sources was compiled by the Community Relations Department and presented to the Steering Committee on disease prevalence, health indicators, health equity, and mortality.

This CHNA provides a foundation for the organization's efforts to guide community benefit planning to improve the health status of the community served.

PRIORITIZED AREAS

Based on the data collected, the RHRCC Steering Committee conducted a prioritization exercise to determine the top-ranked priority areas for the county. Members identified current resources and possible barriers to resources that residents may experience.

The RHRCC CHNA Steering Committee selected the following priority areas for action:

Priority 1: MENTAL HEALTH AND SUBSTANCE USE

Priority 2: PHYSICAL ACTIVITY AND OBESITY

Priority 3: CARING FOR AGING ADULTS

The plan for addressing these prioritized areas are outlined in the 2023 Implementation Strategy on page 71. This report will be disseminated throughout the community and made available on the hospital's website: rockcastleregional.org.

This CHNA will serve as a tool toward reaching three basic goals:

1. To improve residents' health status, increase their life spans, and elevate their overall quality of life.

A healthy community is not only one where its residents suffer little from physical and mental illness, but also one where its residents enjoy an improved quality of life.

2. To reduce the health disparities among residents.

By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these individuals may then be developed to combat some of the socioeconomic factors, which have historically had a negative impact on residents' health.

3. To increase accessibility to preventive services for all community residents.

More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans, and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.



Rockcastle Regional Hospital & Respiratory Care Center

MISSION

Rockcastle Regional Hospital & Respiratory Care Center is a family-oriented team of healthcare professionals dedicated to delivering the highest quality of care to those we serve

VISION

Rockcastle Regional Hospital & Respiratory Care Center's vision is to be the hospital of choice for healthcare in Rockcastle County and surrounding areas and to be the facility of choice nationwide in ventilator care.

VALUES

Our work will be guided by our commitment to quality of care, patient safety, service excellence, cleanliness, and the health of our community.

ABOUT THE ORGANIZATON

Rockcastle Regional Hospital & Respiratory Care Center (RHRCC) has been providing quality healthcare to Rockcastle and surrounding counties for more than 67 years. Starting as an acute-care facility in 1956, the hospital has adapted as healthcare needs have changed. In 1980, RHRCC opened its first long-term care unit with 32 beds and added 28 more beds just 12 years later. In 2006, the Respiratory Care Center grew by 19 beds. The organization expanded again by 14 beds in 2009 to meet the growing demand for quality ventilator care.

In 2016, a 67,000 square-foot expansion project was completed which added 28 more ventilator beds to the Respiratory Care Center, bringing the total to 143 and making the hospital the largest freestanding ventilator-dependent facility in the nation. This expansion also added a dialysis clinic, a 2,200 square-foot resident rehabilitation center, six ventilator-dependent beds that can accommodate bariatric patients, a dedicated resident dining area, a larger chapel dedicated to residents of the Respiratory Care Center, and a new employee child development center.

Today, the Respiratory Care Center offers comfortable, professional, long-term care for ventilator-dependent residents, mostly from Kentucky and surrounding states. It remains the only facility in the state that specializes in caring for ventilator-dependent adults and children.

In addition to the Respiratory Care Center, Rockcastle Regional services also include:

- acute care (inpatient)
- clinical laboratory
- consulting specialty clinics
- dental
- diagnostic imaging
- dialysis
- emergency department

- hematology and oncology
- home health
- medical nutrition therapy
- outpatient cardiac rehabilitation
- outpatient pulmonary rehabilitation
- outpatient rehabilitation

- outpatient surgery
- pediatric and adolescents
- primary care
- psychiatry and behavioral health
- QuickCare walk-in clinic
- retail pharmacy

Under the RHRCC umbrella are three federally designated rural health clinics:

- Rockcastle Family Wellness
- Brodhead Family Care
- Rockcastle Pediatrics and Adolescents

The rural health clinics provide primary care and behavioral health services to adults, children, and adolescents. The clinics offer a sliding income-based fee scale for patients who are not eligible for Medicaid, but have a relatively small household income.

RHRCC has 62 physicians and consulting physicians on staff, as well as 45 allied health providers. Many of the visiting physicians are employed by the University of Kentucky HealthCare (UKHC), as RHRCC has formal affiliations with UKHC entities such as Markey Cancer Center and the Gill Heart Institute. The hospital also has a service agreement with Baptist Health Lexington.



Rockcastle Regional Hospital & Respiratory Care Center

Physicians and allied health providers are on staff who specialize in the following:

- allergy and immunology
- cardiology
- dentistry
- diagnostic radiology
- endocrinology
- family medicine
- general surgery
- gynecology
- hematology

- internal medicine
- nephrology
- nerve study
- neurology
- oncology
- ophthalmology
- orthopaedics
- pain medicine
- pathology

- pediatric cardiology
- pediatric pulmonology
- pediatric urology
- pediatrics
- podiatry
- psychology
- pulmonology
- urology

Over the years, RHRCC has grown, and so has its reputation for quality care across all services. The organization is a thirteen-time Kentucky Hospital Association Quality Award Winner; a Newsweek Best Nursing Home for 2024; a U.S. News & World Report Best Nursing Home for Long-Term Care in 2013, 2014, 2019-20, 2022-23, and 2024; a U.S. News & World Report Best Nursing Home for Short-Term Care in 2024; a winner of the Women's Choice Award for America's 100 Best Hospitals for Patient Experience 2013-2021 and 2022; was recognized with the Women's Choice Award as an America's Best Emergency Care Hospital in 2015, 2016, 2018; and was honored by the Women's Choice Award as an America's Best Hospital for Outpatient Experience 2019-2023; was named a "Best Places to Work in Kentucky" 2016-2019 and 2021.

The organization has a rich history of community service and was recognized for that commitment in 2013 with the Jackson Healthcare Charitable Services Award. In 2022, the hospital connected with nearly 6,100 community members with various programs and outreach efforts, and generated a community prevention/education/health promotion benefit of \$65,626.

COMMUNITY SERVED

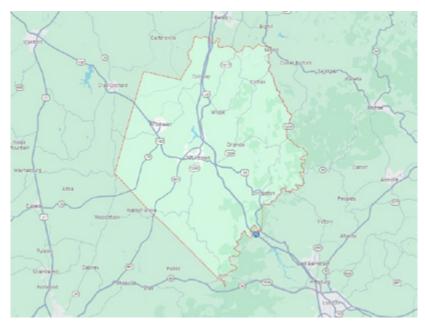
This assessment focuses on Rockcastle Regional's acute care and outpatient services. Though the hospital occasionally serves patients from other counties, the vast majority (68 percent of inpatients and outpatients combined) are residents of Rockcastle County.





Rockcastle Regional Hospital & Respiratory Care Center (RHRCC) is located in Mount Vernon, Kentucky, in Rockcastle County. Created out of Knox, Lincoln, Madison, and Pulaski counties, Rockcastle County was the 52nd Kentucky county in order of formation. The county is nestled in the foothills of southeastern Kentucky with Interstate 75 bisecting the county from North to South.

Mount Vernon is located 54 miles south of Lexington (second largest city in Kentucky), 129 miles south of Louisville (largest city in Kentucky), 133 miles south of Cincinnati, Ohio, and 119 miles north of Knoxville, Tennessee. Interstate 75 brings tourism travelers to the county of Rockcastle, as well as travelers to RHRCC who fall ill or are in accidents while passing through the area.



There are three incorporated towns located within Rockcastle County: Mount Vernon (the county seat), Brodhead, and Livingston.

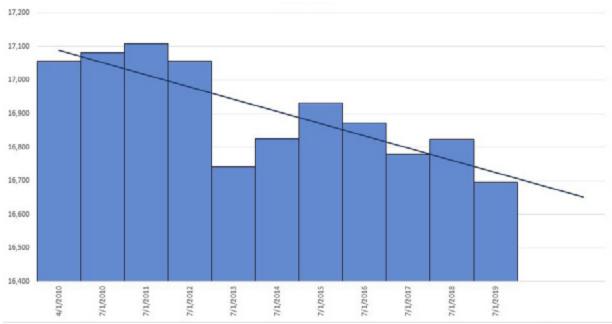


Population Statistics

GENERAL

From 2010 to the most recent U.S. Census in 2020, Rockcastle County has seen an overall population decline of 6 percent. In 2010, the census population of Rockcastle County was 17,056 and in the 2020 Census, that number dropped to 16,037. In comparison, Rockcastle's 6 percent drop fares worse to the overall growth rate of the state of Kentucky of 3.8 percent.

Rockcastle Census Population, 2010-2019



AGING POPULATION

The median age in Rockcastle is 42.9, with 37.5 percent of the population being 17 years or younger and 78.5 percent is 18 years and older. 18.8 percent of those living in the county are age 65 or older, in comparison to the state's rate of 17.5 percent. Addressing the health concerns of an aging population brings more complexities, as the rate of chronic conditions increases as a person ages.

RACIAL DIVERSITY

While there are similarities between Rockcastle's age demographics and the state, there is very little racial or ethnic diversity in the county.

Racial Diversity in Rockcastle County, 2020 Census

	Rockcastle	Kentucky
American Indian/Alaskan Native	35	12,801
Asian	30	24,426
Black or African American	60	362,417
Hispanic or Latino	172	207,854
Native Hawaiian/Other Pacific Islander	0	3,681
Not Hispanic or Latino (White Alone)	15,316	3,664,764
Two or More Races	451	244,840

HOUSEHOLDS AND INCOME

Rockcastle County, with a population of 16,037, is relatively poor. Local residents say one of the county's greatest needs is having more, better-paying jobs. This is significant because studies show that those with higher incomes are more likely to be healthier than those with lower incomes.

According to the 2020 Census, the median household income in Rockcastle County was \$45,693 among a total of 6,380 households. The poverty rate is 23.6 percent, 7.1 percent higher than the rate in Kentucky.

Poverty in Rockcastle County by Age

Under 18	33.6%
18 – 64	20.8%
65 and older	21.1%

The median gross rent is \$685, which is fairly low in comparison to the state median of \$891. 76.0 percent of those in Rockcastle County own their own home, which is higher than the state's rate of 68.8 percent. The majority of homes in the county are valued at \$149,999 or lower.

Home Values in Rockcastle County

Home Value	Percent
Less than \$50,000	25.6%
\$50,000 - \$99,999	24.3%
\$100,000 - \$149,999	19.7%
\$150,000 - \$199,999	14.7%
\$200,000 - \$299,999	8.8%
\$300,000 - \$499,999	4.4%
\$500,000 - \$999,999	2.3%
\$1,000,000 or higher	0.2%

SCHOOL ENROLLMENT

Rockcastle County is well known throughout the state for the quality of their school system, Rockcastle County Schools. The Rockcastle County school system consists of one high school, one middle school, three elementary schools, an area technology center, and an adult education center.

The enrollment rate of K-12 is 78.9 percent, which is 8.2 percent higher than the statewide rate. Beyond the K-12 grades, 14.1 percent are enrolled in some type of college or undergraduate program and 2 percent are enrolled in a graduate or professional level program. Of those living in the county who are age 25 or older, 45.5 percent have a high school or equivalent degree, 19.7 percent have some college but no degree, 4.7 percent have an associate's degree, 5.6 percent have a bachelor's degree, and 6.5 percent have a graduate or professional level degree.

Although there is not a bricks-and-mortar institute of higher learning inside Rockcastle County, Somerset Community College (SCC), a college within the Kentucky Colleges and Technical College Systems (KCTCS), has campuses in Somerset and London, each of which are within commuting distance. SCC also offers college classes to Rockcastle County High School students that can be taken during senior year. Berea College and Eastern Kentucky University are 17 and 28 miles, respectively, from Mount Vernon. There are, of course, post-secondary programs available online from many institutions.



EMPLOYMENT AND LABOR FORCE

The three largest employers are RHRCC, Rockcastle County Schools, and a data processing center called Excela.

The top three industries employed by those in Rockcastle County make up 60.5 percent of the working population:

- 1. Education Services, Healthcare, & Social Assistance 26.7%
- 2. Manufacturing 20.8%
- 3. Retail Trade 13.0%

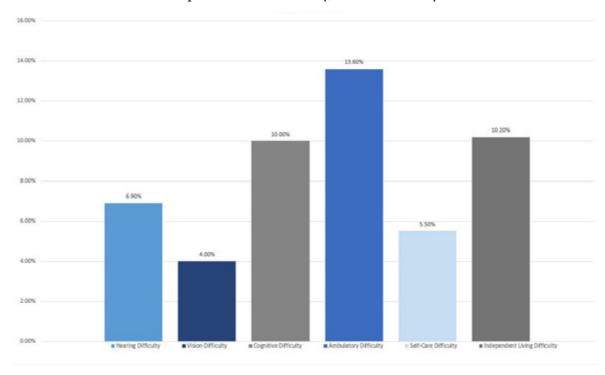
There are 198 total employer establishments in the county. Of the working population, 68.8 percent are employed by private companies, 18.0 percent are employed by either local, state, or federal government, and 7.4 percent are by private non-profit companies. The average travel time to work reported by those in the county is 26.3 minutes, as compared to the state average of 24.1 minutes. In Rockcastle County, 83.7 percent of the population lives in a low population density area (500 or fewer people per square mile and less than 2,500 people), so this commute time would indicate a large portion of the population travels outside of the county for employment.

Like most counties in Kentucky, Rockcastle's economy historically has been agriculturally based. Though that has changed significantly over the last twenty years, still there were 681 farms in operation in 2023 with 1,041 farm operators, and 286 hired workers. 40 percent of the county's land is used for farm operations, compared to the state average of 51 percent.

DISABILITY

A significant portion of the population in Rockcastle (22.2 percent) is classified as disabled, as compared to the state rate of 18.1 percent. The top three disabilities are Ambulatory Difficulty (13.6 percent), Independent Living Difficulty (10.2 percent), and Cognitive Difficulty (10.0 percent).

Population with a Disability, Rockcastle County



Health Statistics

GENERAL

The population of Rockcastle County, like that of many Kentucky counties, suffers from relatively poor health. Risk factors such as smoking and obesity, and chronic conditions such as heart disease, diabetes, and stroke, on average, occur at higher rates in Rockcastle County than in the nation as a whole, and often are higher than the statewide average.

According to the University of Wisconsin Population Health Institute's 2023 County Health Rankings, Rockcastle County was the 91st healthiest of Kentucky's 120 counties. This is an improvement from the 2019 rankings when the county came in at the 96th healthiest county. Prior to this, the county's ranking only declined since 2010, the first year the rankings were published, when it was ranked 76th.

The County Health Rankings break the data up into two categories: Health Outcomes and Health Factors.

Health Outcomes refer to how long people live on average within a community, and how much physical and mental health people experience in a community while they are alive. In terms of Health Outcomes, Rockcastle County is ranked among the least healthy counties in Kentucky, coming in the lowest category of 0 percent to 25 percent.

Health Factors refer to how various aspects influence how well and how long people live. Health Factors represent those things that can be improved in order to live longer and healthier lives. They are indicators of the future health of communities. Rockcastle County is ranked in the lower middle range of counties in Kentucky, coming in at the second to last category of 25 percent to 50 percent.

According to the Centers for Medicare and Medicaid Services' (CMS) Behavioral Risk Factor Surveillance System, 27.8 percent of adults ages 18 and older in Rockcastle County self-reported their general health status as "fair" or "poor."

Self-Reported Fair or Poor Health

Report Area	Total Population	Adults Age 18+ with Poor or Fair General Health (Crude)	Adults Age 18+ with Poor or Fair General Health (Age-Adjusted)	Percentage of Adults Age 18+ with Poor or Fair General Healt
Rockcastle County, KY	16,115	27.80%	25.40%	
Kentucky	4,509,394	21.92%	20.73%	0N 30N
United States	331,893,745	16.10% coe.	15.20%	 Rockcastle County, KY (27.80%) Kentucky (21.92%) United States (16.10%)

According to the County Health Rankings, the average number of physically unhealthy days reported in the last 30 days by adults in Rockcastle County were 4.9, in comparison to 4.3 statewide and 3.0 nationwide. Similarly, 16 percent of adults in Rockcastle County reported 14 or more days of poor physical health per month (age-adjusted), in comparison to 14 percent statewide and 9 percent nationwide.

In terms of quality of life, the average number of mentally unhealthy days reported by adults in Rockcastle County over the last 30 days were 6.1, compared to 5.5 statewide and 4.4 nationwide. Similarly, 20 percent of Rockcastle County adults reported feeling frequent mental distress 14 or more days per month, compared to 18 percent in Kentucky and 14 percent in the nation.

A 2017 Morbidity & Mortality Weekly Report article reported rural residents have higher age-adjusted death rates compared to their urban counterparts. The County Health Rankings reports that life expectancy in Rockcastle County is 73.7 years, compared to 75.1 statewide and 78.5 nationwide. It also reports the top five causes of death for those under age 75 in Rockcastle County are heart disease, malignant neoplasms, accidents, chronic lower respiratory disease, and diabetes mellitus.

The CDC, through its PLACES Interactive Map, reports the prevalence of conditions in adults age 18 and older in 2021. In Rockcastle County, the top condition was obesity, coming in at 44.3 percent, followed by high blood pressure at 43.2 percent, and then high cholesterol in third at 40.2 percent.

Prevalence of Health Conditions, Rockcastle County

Health Condition	Prevalence Rate
Obesity	44.3%
High Blood Pressure	43.2%
High Cholesterol	40.2%
Who have been screened in the last 5 years	
Arthritis	35.6%
Depression	29.3%
All Teeth Lost	19.9%
Adults age 65 and older	
Diabetes	14.7%
Chronic Obstructive Pulmonary Disorder (COPD)	13.4%
Asthma	11.9%
Heart Disease	9.4%
Cancer	8.1%
Stroke	4.4%
Kidney Disease	3.8%

Source: PLACES Interactive Map is a collaboration between the CDC, the Robert Wood Johnson Foundation, and the CDC Foundation.

PLACES provides health data for smaller areas across the country. It provides model-based, population-level analysis and community estimates of health measures to all counties, places, census tracts, and zip code tabulation areas.

There are also factors to consider when examining the rate of chronic conditions in rural areas, like Rockcastle County. Generally, rural areas have a larger aging population than their urban counterparts, and as individuals age, their risk of having multiple chronic conditions increases. Additionally, those in rural areas tend to have poor health-related behaviors relative to chronic conditions, environmental and occupational factors, and low screening rates – all which contribute to poorer health outcomes and chronic health conditions.

Screening rates and preventive care for chronic conditions also tend to be lower and less utilized in rural areas. The CDC estimates that in Rockcastle County, adults ages 65 and older utilize core prevention services at a rate of 36.1 percent for women and 39.9 percent for men.

The CDC's PLACES provides estimates for the prevalence of prevention services utilized in Rockcastle County for adults ages 18 and older, such as cancer screenings and health checkups. It reports that only 75.6 percent of adults get their recommended annual checkup, while only 48.4 percent have visited the dentist. In terms of cancer screenings, only 66.9 percent of women ages 50-74 have received their annual mammogram screening and only 79 percent of women ages 21-65 have received a cervical cancer screening. For both men and women age 50-75, only 69.8 percent have received some form of colorectal cancer screening.

Johns Hopkins University conducted a study regarding the incidence rate of COVID-19 throughout the country. The study determined incidence rates of COVID-19 cases per 100,000 population from the start of the pandemic through March of 2023, when the study was discontinued. In Rockcastle County, the incidence rate of COVID-19 was 39,880.60, in comparison to the state rate of 38,402.25 and the national rate of 31,100.91.

COVID-19 Incidence Rate

Report Area	Total Population	Total Confirmed Cases	Confirmed Cases, Rate per 100,000 Population	Last Update
Rockcastle County, KY	16,750	6,680	39,880.60	03/10/2023
Kentucky	4,468,402	1,715,967	38,402.25	03/10/2023
United States	326,262,499	101,470,604	31,100.91	03/10/2023

Note: This indicator is compared to the state average.

Data Source: Johns Hopkins University. Accessed via <u>ESRI</u>. Additional data analysis by CARES. 2022. → Show more details



Additionally, the study reported the mortality rate of COVID-19 as 417.91 in Rockcastle County, 405.74 in Kentucky, and 337.86 in the nation. In both measures, Rockcastle County fared worse.

COVID-19 Mortality Rate



Additionally, CDC reports COVID-19 vaccination rates as lower in Rockcastle County than in both the state and nation. Only 48.80 percent of adults in Rockcastle County have been fully vaccinated. This number comes in at nearly 16 points below the state rate of 64.71 percent and nearly 26 points below the national rate of 74.39 percent.

Health Statistics: Chronic Diseases

According to the CDC, six in ten Americans live with at least one chronic disease, like heart disease, stroke, cancer, or diabetes. These and other chronic diseases are the leading causes of death and disability in America and they are also a leading driver of healthcare costs.

Top Chronic Conditions in the U.S.

- 1. Heart Disease
- 2. Cancer
- 3. Chronic Lung Disease
- 4. Stroke
- 5. Alzheimer's Disease
- 6. Diabetes
- 7. Chronic Kidney Disease

While 60 percent of American adults have a chronic disease, the CDC's National Center for Chronic Disease Prevention and Health Promotion reports that four in ten adults have two or more chronic diseases, also referred to as multiple chronic conditions

While chronic diseases like diabetes, cancer, and cardiovascular disease are the leading cause of death in the U.S., one or more of five chronic diseases cause more than two-thirds of all deaths: heart disease, cancer, stroke, COPD, and diabetes. Additionally, while they are not only the leading cause of death and disability in the nation, chronic conditions are also the leading drivers of the country's \$4.1 trillion spent in annual healthcare costs.

The impact of chronic diseases also have a greater impact on rural areas as they tend to have higher rates for many of the most prevalent diseases.

One or more of five chronic diseases cause more than two-thirds of all deaths: heart disease, cancer, stroke, COPD, and diabetes.



Chronic Disease and Conditions Prevalence, 2013

Chronic Disease	Nonmetropolitan	Metropolitan
High cholesterol	42.4%	38.8%
High blood pressure	38.1%	32.6%
Arthritis	31.1%	25.1%
Depressive disorder	20.1%	17.5%
Asthma	13.9%	14.0%
Diabetes	12.0%	10.4%
Chronic Obstructive Pulmonary Disease (COPD)	8.7%	6.3%
Heart disease	8.6%	6.5%

Rural areas not only have higher incidence rates of chronic disease, they also experience higher related mortality rates. According to a National Center for Health Statistics report, rural residents report higher rates of multiple chronic conditions.

Multiple Chronic Conditions, 2016

	Nonmetropolitan	Metropolitan
2-3 chronic conditions	22.6%	18.9%
4 or more chronic conditions	5.1%	4.2%

Individuals with multiple chronic conditions have greater difficulty with activities of daily life and other functions that are important for maintaining independence.



The most recent data (2018) from the CDC reports healthcare spending on chronic conditions in Rockcastle County:

Chronic Conditions Spending, Rockcastle County (2018)	
Alcohol Use	\$17,939.90
Cancer	\$24,594.50
Chronic Kidney Disease	\$24,072.80
COPD	\$21,185.70
Depression	\$16,326.20
Diabetes	\$15,002.50
Drug/Substance Use	\$15,806.80
Heart Failure	\$27,535.70
Hypertension	\$13,449.40
Ischemic Heart Disease	\$18,424.70
Stroke	\$32,078.10

Source: (CMS) The data use in the chronic conditions reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program.

Chronic conditions also affect the affordability of private healthcare coverage. Since 2000, health insurance premiums for employer-sponsored family coverage have increased by 87 percent. Healthcare for people with a chronic disease averages \$6,032 annually – five times higher than for those adults without such a condition.

Additionally, those with multiple chronic conditions have worse health, use more health services, and spend more on healthcare. A recent report by the Partnership to Fight Chronic Diseases determined the treatment for the seven most common chronic diseases, coupled with productivity losses, will cost the U.S. economy \$2 trillion annually, or \$8,600 per person, by 2030. The same report estimated that a reduction in unhealthy behaviors could save 1,100,000 lives per year.

HEART DISEASE AND STROKE

According to the CDC's National Center for Chronic Disease Prevention and Health Promotion, more than 859,000 Americans die of heart disease, stroke, or other cardiovascular diseases every year. Heart disease and stroke are the first and fifth leading causes of death in the U.S.

The Appalachian Regional Commission (ARC) reports that Appalachian Kentucky's heart disease mortality rate is 45 percent higher than the national rate and 32 percent higher than the rate in non-Appalachian Kentucky. However, the CDC's National Vital Statistics System (NVSS) reports the age-adjusted death rate per 100,000 for Rockcastle County is 89.2, in comparison to the state's rate of 102.9.

Coronary Heart Disease Mortality

Report Area	Total Population, 2016-2020 Average	Five Year Total Deaths, 2016-2020 Total	Crude Death Rate (Per 100,000 Population)	Age-Adjusted Death Rate (Per 100,000 Population)	
Rockcastle County, KY	16,749	97	115.8	89.	
Kentucky 4,460,898		27,978	125.4	102.5	
United States	326,747,554	1,838,830	112.5	91.5	

Coronary Heart Disease Mortality,
Age-Adjusted Death Rate
(Per 100,000 Pop.)

Rockcastle County, KY
(89.2)

Kentucky (102.9)

United States (91.5)

Note: This indicator is compared to the state average.

Data Source: Centers for Disease Control and Prevention, CDC - National Vital Statistics System. Accessed via CDC WONDER, 2016-2020. - Show more details



The ARC reports Appalachian Kentucky's stroke mortality rate is 26 percent higher than the national rate and 14 percent higher than non-Appalachian Kentucky. However, the CDC reports the age-adjusted death rate per 100,000 in Rockcastle County is 25.4, nearly 16 points better than the state's rate.

Stroke Mortality

Report Area	Total Population, 2016-2020 Average	Five Year Total Deaths, 2016-2020 Total	Crude Death Rate (Per 100,000 Population)	Age-Adjusted Death Rate (Per 100,000 Population)	
Rockcastle County, KY	16,749	28	33.4	25.4	
Kentucky	4,460,898	10,935	49.0	41.3	
United States	326,747,554	746,604	45.7	37.6	

Note: This indicator is compared to the state average.

Data Source: Centers for Disease Control and Prevention, CDC - National Vital Statistics System. Accessed via CDC WONDER. 2016-2020. → Show more details

CANCER

According to the Foundation for a Healthy Kentucky, the Commonwealth ranks last in the cancer mortality rate. The NVSS reports the age-adjusted death rate per 100,000 for Rockcastle County is 187.4, in comparison to the state's rate of 182.8 and the nation's at 149.4.

Cancer Mortality

Report Area	Total Population, 2016-2020 Average	Five Year Total Deaths, 2016-2020 Total	Crude Death Rate (Per 100,000 Population)	Age-Adjusted Death Rate (Per 100,000 Population)	
Rockcastle County, KY	16,749	205	244.8	187.4	
Kentucky	4,460,898	50,799	227.8	182.8	
United States	326,747,554	2,998,371	183.5	149.4	



Stroke Mortality, e-Adjusted Death Rate (Per 100,000 Pop.)

Kentucky (41.3)
 United States (37.6)

Note: This indicator is compared to the state average.

Data Source: Centers for Disease Control and Prevention, CDC - National Vital Statistics System. Accessed via CDC WONDER, 2016-20. → Show more details

The top diagnosed cancer in Rockcastle County between 2016 and 2020 was lung and bronchus, followed by breast, and then colorectal, according to the American Community Survey. The lung cancer incidence rate in the county was more than twice that of the national rate.

Top Five Most Commonly Diagnosed Cancers

Area Name	Cancer Site	New Cases (Annual Average)	Cancer Incidence Rate (Per 100,000 Population)	
Rockcastle County, Kentucky	1 - Lung & Bronchus (All Stages ^A), 2016-2020	28	116.4	
Rockcastle County, Kentucky	2 - Breast (All Stages ^a), 2016-2020	12	111.2	
Rockcastle County, Kentucky	ounty, Kentucky 3 - Colon & Rectum (All Stages^), 2016-2020		50.2	
Rockcastle County, Kentucky	4 - Prostate (All Stages^), 2016-2020	12	102	
Rockcastle County, Kentucky	5 - Kidney & Renal Pelvis (All Stages^), 2016-2020	6	27.5	
US	1 - Breast (All Stages^), 2016-2020	249,750	127	
US	2 - Lung & Bronchus (All Stages^), 2016-2020	215,307	54	
US	3 - Prostate (All Stages ^A), 2016-2020	212,734	110.5	
US	4 - Colon & Rectum (All Stages ^a), 2016-2020	138,021	36.5	
US	5 - Melanoma of the Skin (All Stages ^A), 2016-2020	83,836	22.5	



LUNG DISEASE

The ARC notes that Appalachian Kentucky's mortality rate is 88 percent higher than the national rate and 38 percent higher than non-Appalachian Kentucky. The CDC shows that Rockcastle's age-adjusted death rate per 100,000 is 16.9 points more than the state's rate.

Lung Disease Mortality

Report Area	Total Population, 2016-2020 Average	Five Year Total Deaths, 2016-2020 Total	Crude Death Rate (Per 100,000 Population)	Age-Adjusted Death Rate (Per 100,000 Population)	
Rockcastle County, KY	16,749	89	106.3		
Kentucky	4,460,898	17,140	76.8	62.2	
United States	326,747,554	783,919	48.0	39.1	



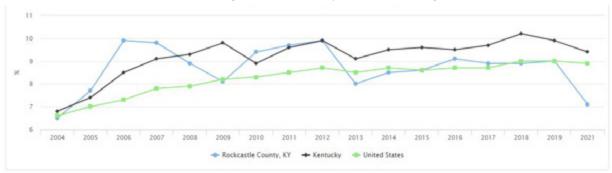
Note: This indicator is compared to the state average.

Data Source: Centers for Disease Control and Prevention, CDC - National Vital Statistics System. Accessed via CDC WONDER. 2016-2020. - Show more details

DIABETES

The CDC reports that more than 37 million Americans have diabetes. People with diabetes are at a higher risk of heart disease, stroke, and other complications, like kidney failure, blindness, and amputation of a toe, foot, or leg. The CDC report a steady increase in diabetes diagnoses from 2004 through 2021. While diabetes diagnoses in Rockcastle County have gone both up and down, the overall trend during the 17-year span is that they are on the rise.

Adults with Diagnosed Diabetes by Year, 2004 through 2021



According to the ARC, the diabetes mortality rate in Appalachian Kentucky is 32 percent higher than the national rate and 12 percent higher than non-Appalachian Kentucky. However, the CDC shows the rate in Rockcastle to be 2.3 points better than the state's rate.

Diabetes Prevalence in Adults

Report Area	Population Age 20+	Adults Age 20+ with Diagnosed Diabetes	Adults Age 20+ with Diagnosed Diabetes, Age-Adjusted Rate	Percentage of Adults Age 20 with Diagnosed Diabetes (Age-Adjusted), 2021
Rockcastle County, KY	12,318	1,084	7.196	
Kentucky	3,375,636	363,411	9.4%	ON 15N
United States	232,706,003	23,263,962	8.9%	 Rockcastle County, KY (7.1%)
vote: This indicator is compared to t		Change Disease Drawaning and Lizalith Draw		 Kentucky (9.4%) United States (8.9%)



MENTAL HEALTH

According to the ARC, the average adult in Appalachian Kentucky reports feeling mentally unhealthy 25 percent more often than the average American and 15 percent more often than the average adult in non-Appalachian Kentucky. The Kentucky Hospital Association (KHA) found that in 2019, 50 percent of Kentucky's 2.4 million emergency department visits (approximately 1.2 million visits) reported a diagnosis of either mental health illness or substance use disorder. The following year, in 2020, that number increased to 53 percent, despite the overall number of emergency department visits declining to 1.9 million, which was during the pandemic.

The American Association of Suicidology ranks Kentucky as 22nd in the nation for suicide deaths. In 2019, the state's suicide rate was 16.9 per 100,000 population, translating to 756 deaths. The NVSS had similar findings when looking at years 2016 through 2020.

Suicide Mortality

Report Area	Total Population, 2016-2020 Average	Five Year Total Deaths, 2016-2020 Total	Crude Death Rate (Per 100,000 Population)	Age-Adjusted Death Rate (Per 100,000 Population)	
Rockcastle County, KY	16,749	14	No data	No data	
Kentucky	4,460,898	3,883	17.4	17.1	
United States	326,747,554	233,972	14.3	13.8	

(Per 100,000 Pop.)

0 50

• Kentucky (17.1)

• United States (13.8)

Note: This indicator is compared to the state average.

Data Source: Centers for Disease Control and Prevention, CDC - National Vital Statistics System. Accessed via CDC WONDER, 2016-20. → Show more details

The demand for mental health services has also increased for children as they navigate the unique challenges that can profoundly impact their mental well-being. Economic instability, unstable home lives, and social isolation contribute to heightened stress levels among rural youth. The lack of sufficient mental health resources in schools exacerbates these issues, leaving children without essential support systems to address their emotional needs.

Adverse Childhood Experiences (ACEs) are events such as abuse, neglect, and household dysfunction during childhood and have a lifelong impact on health outcomes. In rural Kentucky, where poverty rates exceed national averages, children are disproportionately exposed to ACEs, which significantly increase the risk of mental health disorders later in life. Further, ACEs can negatively affect educational attainment, job opportunities, and earning potential.

One in five Kentucky kids, or 22 percent, has experienced at least two ACEs, ranking 14th in the nation.

The Foundation for a Healthy Kentucky reports that one in five Kentucky kids, or 22 percent, has experienced at least two ACEs, ranking 14th in the nation. Toxic stress from ACEs can change brain development, impacting attention, decision-making, learning, and response to stress. Additionally, research has shown that those with six or more ACEs had a shorter life expectancy by nearly 20 years.

Health Statistics: Health Risk Factors

Many things influence how well and how long we live. Health risk factors represent those things we can improve to live longer and healthier lives. They are indicators of the future health of our communities. The University of Wisconsin's County Health Rankings ranks Rockcastle County in the lower to middle range category among all other counties in the country, coming in the range of 25 percent to 50 percent.

Risky behaviors, such as excessive alcohol use, physical inactivity, poor nutrition, tobacco use, and ignoring known risks like family medical histories can result in a dramatic increase in chronic conditions.



Health Risk Factors				
Behavior	Rockcastle	Kentucky	U.S.	
Adult Smoking	28%	22%	16%	
Adult Obesity	40%	37%	32%	
Food Environment Index	7.5	6.5	7.0	
Physical Inactivity	35%	29%	22%	
Access to Exercise Opportunities	27%	70%	84%	
Excessive Drinking	17%	17%	19%	
Alcohol-Impaired Driving Deaths	14%	25%	27%	
STIs	137.8	419.7	481.3	
Teen Births	32	29	19	
Food Insecurity	16%	13%	12%	
Drug Overdose Deaths	34	36	23	
Insufficient Sleep	40%	39%	33%	

PHYSICAL INACTIVITY

Engaging in regular physical activity is not just about maintaining a certain body shape or achieving fitness goals, it is fundamentally linked to our overall health and well-being.

Recent studies show that regular physical activity improves the quality of sleep, increases the ability to perform everyday activities, improves cognitive ability and reduces the risk of dementia, and improve bones and musculoskeletal health. Not getting enough physical activity raises the risk of heart disease and increases the likelihood of developing other risk factors like obesity, high blood pressure, high cholesterol, and type II diabetes. It also can increase the risk of many cancers such as breast, colon, and uterine. There is even emerging research that suggests physical activity may help the immune system protect the body from infection and disease. From reducing the risk of chronic diseases to improving mental health, the benefits of staying physically active are manifold.

POOR NUTRITION

Poor nutrition is a significant risk factor for the development of chronic conditions, contributing to a host of health problems that can severely impact overall well-being. A diet lacking in essential nutrients not only fails to support the body's basic functions, but also increases susceptibility to chronic diseases. For instance, diets high in processed foods, saturated fats, and sugars have been strongly linked to conditions like obesity, type II diabetes, and cardiovascular diseases. These foods not only lead to weight gain, but also disrupt metabolic processes, raise blood sugar levels, and elevate cholesterol, all of which can contribute to the onset and progression of chronic illnesses.

Rural areas that have a lack of access to healthy foods are at a greater risk of poor nutrition. When healthy options are not available, people may settle for foods that are higher in calories and lower in nutritional value.

HIGH BLOOD PRESSURE AND HIGH CHOLESTEROL

High blood pressure and high cholesterol represent significant risk factors for the development of chronic conditions, including cardiovascular diseases such as heart disease and stroke. Persistent high blood pressure, or hypertension, places strain on the arteries and heart, increasing the likelihood of arterial damage, heart attacks, and other cardiovascular complications. Similarly, elevated levels of cholesterol in the blood can lead to the formation of plaque within arteries, narrowing the blood vessels and impeding proper circulation. Over time, this buildup can result in atherosclerosis, a condition characterized by hardened and narrowed arteries, which heightens the risk of heart disease and stroke.

The combination of high blood pressure and high cholesterol compounds the health risks for individuals in rural settings. Limited access to fresh and nutritious foods, along with lower rates physical activity, can exacerbate chronic conditions.

OBESITY

According to the CDC, obesity is a common, serious, and costly chronic disease of adults and children that continues to increase in the U.S. and is putting a strain on American families, affecting overall health, healthcare costs, productivity, and military readiness.

Obesity Prevalence

Report Area	Population Age 20+	Adults with BMI > 30.0 (Obese)	Adults with BMI > 30.0 (Obese), Percent	Percentage of Adults Ob (BMI > 30.0), 2021
ockcastle County, KY	12,387	2,911	23.2%	
entucky	3,377,595	1,078,014	31.8%	
Inited States	232,757,930	70,168,831	30.1%	ON S

According to the Foundation for Healthy Kentucky, 25.5 percent of youth ages ten to seventeen in Kentucky have obesity, giving the state a ranking of second among all fifty states and D.C.

In rural areas, like Rockcastle County, access to healthy and affordable food becomes a barrier in fighting obesity. In a study conducted by the CDC, it was determined that more than half of Americans do not live within a half mile of a park and 40 percent do not live within a mile of healthier food retailers.

TOBACCO USE

Tobacco is the leading cause of preventive disease, disability, and death in Kentucky, according to the Foundation for a Healthy Kentucky. In a study conducted by the organization, it found the state has the second highest adult smoking rate in the nation and that one in four high school students and one in five middle school students report using tobacco, including e-cigarettes. The CDC reports that every day in the U.S., about 1,600 young people under the age of eighteen try their first cigarette and nearly 200 end up smoking cigarettes daily.

In the most recent Kentucky High School Youth Risk Behavior Survey (2021), 4.9 percent of Kentucky teens reported smoking at least one day in the last 30 days. In the same survey, 45.1 percent reported using vape products

ALCOHOL OVERUSE

According to the CDC, the excessive use of alcohol is a leading cause of preventable death in America, shortening the lives of those who die by its use by an average of 26 years. It is estimated that one in six adults in the U.S. binge drinks, with 25 percent doing so at least weekly, and 25 percent consuming at least eight drinks during a binge occasion.

The chronic health effects of alcohol are extensive and can lead to chronic disease and other serious problems with learning, memory, and mental health. Other chronic health conditions related to excessive alcohol use are high blood pressure, heart disease, stroke, liver disease, and cancer.

SUBSTANCE USE

The Kentucky Injury Prevention and Research Center reports that poisoning remains the leading cause of injury-related mortality for Kentucky residents ages 24 to 64 between the years 2016 and 2020. In 2020, Kentucky had the third highest age-adjusted overdose fatality rate in the nation, with 49.3 deaths per 100,000, in comparison to the national rate of 28.3. Only West Virginia and the District of Columbia had higher rates.



Rockcastle County Drug Overdose Rates

Category	Indicator	2018	2019	2020	2021	2022
ital Overdose	Any Drug-Involved Fatal Overdose	**	**	**	93.1^	**
	Any Opioid-Involved Fatal Overdose				68.3^	
	Cocaine-Involved Fatal Overdose	0	0		0	0
	Heroin-Involved Fatal Overdose	0	0	0	0	0
	Non-Cocaine Stimulant-Involved Fatal Overdose		**		62.1^	
	Non-Heroin Opioid-Involved Fatal Overdose	**	**	**	68.3^	
	Stimulant-Involved Fatal Overdose				62.1^	
Nonfatal Overdose-Related ED Visits	Any Drug-Involved Nonfatal Overdose	219.9	185.7	280.3	390.9	254.4
	Any Opioid-Involved Nonfatal Overdose	65.4^	71.9^	143.3	223.4	124.1
	Cocaine-Involved Nonfatal Overdose	0	0	0	0	0
	Heroin-Involved Nonfatal Overdose		**	62.3^	99.3^	**
	Non-Cocaine Stimulant-Involved Nonfatal Overdose					
	Non-Heroin Opioid-Involved Nonfatal Overdose			81.0^	124.1	74.5^
	Stimulant-Involved Nonfatal Overdose					
Nonfatal Overdose-Related Inpatient	Any Drug-Involved Nonfatal Overdose	95.1^		81.0^		99.3^
Hospitalization	Any Opioid-Involved Nonfatal Overdose					**
	Cocaine-Involved Nonfatal Overdose			0	0	0
	Heroin-Involved Nonfatal Overdose	**		**		0
	Non Heroin Opioid-Involved Nonfatal Overdose		**		**	
	Stimulant Not Cocaine-Involved Nonfatal Overdose	**	0	**		
	Stimulant-Involved Nonfatal Overdose	**	**	**	**	**
Substance Use Disorder Diagnosis	ED Visits	957.0	868.5	853.4	974.2	837.7
	Inpatient Hospitalizations	83.2^	**	**	**	

Approximately 81 percent of Kentucky resident overdose deaths in 2020 involved opioids. Additionally, the proportion of Kentucky resident overdose deaths involving fentanyl has increased from 29 percent in 2016 to 69 percent in 2020.

SUN EXPOSURE

Skin cancer is the most common cancer in the U.S. with most cases of melanoma, the deadliest kind of skin cancer, being caused by exposure to ultraviolet light from the sun or tanning beds. Despite the use of sun protection increasing slightly and the use of tanning beds decreasing slightly in recent years, sunburn is still common throughout the U.S. The CDC estimates that roughly one-third of U.S. adults and over half of high school students get sunburned each year.

IMMUNIZATIONS AND INFECTIOUS DISEASES

The Foundation for a Healthy Kentucky reports that the Commonwealth ranks 24th in the nation for adults receiving recommended immunizations. For children ages 19 to 25 months, it ranks 16th in the nation for receiving all recommended doses of the combined seven-vaccine series. This is an important fact to note because several infectious diseases cause a variety of cancers.

COVID-19 HEALTH DEBT

One of the most significant and long-lasting fallouts from the COVID-19 pandemic is what is known as the growing health debt. This term refers to the accumulated impact resulting from changes of health behaviors during the pandemic which will continue to have negative impacts on health for years to come. The changes in health behavior include things like missed preventive screenings that result in late stage diagnoses, delayed or foregone treatment and management of chronic diseases that result in poorer health outcomes and development of multiple chronic conditions, as well as changes in behavior such as increased alcohol consumption or decreased physical activity. All of these behaviors, and many more, have cumulated to a staggering health debt. Unfortunately, this debt falls heaviest on those who can least afford it: the uninsured, those who lack access to healthcare, those who cannot financially afford healthier foods that lead to better health outcomes, and those with limited access to physical activity.

Social Determinants of Health

The Social Determinants of Health (SDOH) are the conditions in the environment where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risk. There are five main domains:

Social Determinants of Health



There are also subdomains that fall within the broader categories, such as food instability, unemployment, or transportation, which also affect a person's life and overall health condition.

EDUCATION ACCESS AND QUALITY

The access to and quality of education is closely tied to many aspects of health outcomes. Individuals who lack the ability to read and write might find it more difficult to find, understand, and use their personal health information, potentially negatively affecting their overall health outcomes and lifespan.

Preschool is a time for school-readiness, where students are beginning to lay the building blocks for future literacy and success in school. According to the most recent American Community Survey (ACS), Rockcastle County falls behind in the preschool enrollment rate of the state of Kentucky, as well as the nation.

Preschool Enrollment, Age 3-4



Preschool Enrollment by Ethnicity Alone

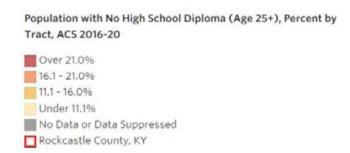
Report Area Total Enrolled in Preschool		Hispanic Enrolled	Hispanic Enrolled, Percent	Non-Hispanic Enrolled	Non-Hispanic Enrolled, Percent	
Rockcastle County, KY	146	6	4.11%	140	95.89%	
Kentucky	44,300	3,631	8.20%	40,669	91.80%	
United States	3,719,992	1,017,882	27.36%	2,702,110	72.64%	

Data Source: US Census Bureau, American Community Survey. → Show more details

The impact also extends beyond literacy. Studies have shown that children from low-income families, children with disabilities, and children who routinely experience 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 decreases their chance of getting a high-paying job, which then traps them in a poverty cycle.

Population with No High School Diploma





According to the U.S. Department of Health and Human Services (HHS), people with higher levels of education are more likely to be healthy and live longer. It further explains that when children are living in poverty, it can affect their brain development, making it harder for them to do well in school.

ECONOMIC STABILITY

The HHS reports that one in ten people in the U.S. live in poverty. The Appalachian Regional Commission (ARC) has identified Kentucky as economically "distressed" since 2007.

When people are able to have steady employment, they are less likely to live in poverty. People with disabilities, injuries, or certain health conditions that limit their abilities may find it especially difficult to find steady employment. Many of these individuals do not earn enough money to buy the things they need to stay healthy, like healthier food and health insurance. Additionally, the HHS notes that adults with lower incomes are more likely to have disabilities and die younger than their higher income counterparts. Also, disability is likely to start earlier in life for those with lower incomes, further raising the risk of early mortality.

Average Annual Unemployment Rate, 2011-2021

Report Area	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Rockcastle County, KY	11.4%	10.3%	9.2%	7.5%	6.3%	6.0%	5.7%	4.9%	4.6%	7.2%	4.7%
Kentucky	9,4%	8.2%	7.9%	6.4%	5.2%	5.0%	4.8%	4.2%	4.1%	6.5%	4,4%
United States	9.0%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	8.1%	5,4%

Data Source: US Census Bureau. American Community Survey. → Show more details



Labor Force Participation Rate

Report Area	Total Population Age 16+	Labor Force	Labor Force Participation Rate	
Rockcastle County, KY	13,659	6,861	50.23%	
Kentucky	3,567,512	2,107,184	59.07%	
United States	261,649,873	164,759,496	62.97%	

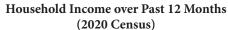
Note: This indicator is compared to the state average.

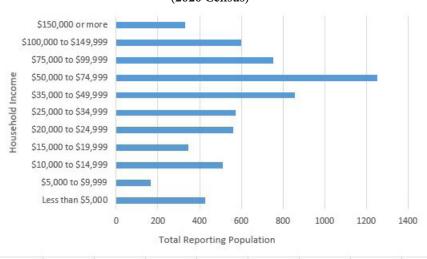
Data Source: US Census Bureau, American Community Survey. 2016-20. → Show more details



Household Income

Report Area	Under \$25,000	\$25,000 - \$49,999	\$50,000 - \$99,999	\$100,000 - \$199,999	\$200,000+
Rockcastle County, KY	38.88%	20.11%	29.45%	10.21%	1,36%
Kentucky	25.21%	24.28%	29.81%	16.81%	3.90%
United States	19.26%	21.21%	29.95%	21.91%	7,67%





Median Household Income

Report Area	Total Households	Average Household Income	Median Household Income
Rockcastle County, KY	6,609	\$54,630	\$38,744
Kentucky	1,748,053	\$72,318	\$52,238
United States	122,354,219	\$91,547	\$64,994

Note: This indicator is compared to the state average.

Data Source: US Census Bureau, American Community Survey. 2016-20. \Rightarrow Show more details





Per Capita Income by Race Alone

Report Area	White	Black or African American	Native American or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Race
Rockcastle County, KY	\$21,125.00	\$6,635.00	\$0.00	\$12,857.00	No data	\$0.00	\$3,463.00
Kentucky	\$29,298.00	\$21,131.00	\$33,696.00	\$19,864.00	\$18,755.00	\$15,307.00	\$13,281.00
United States	\$37,326.00	\$23,383.00	\$40,524.00	\$20,844.00	\$24,961.00	\$19,071.00	\$20,296.00

Population Below 100% of Federal Poverty Level

Report Area	Total Population	Population in Poverty	Population in Poverty, Percent	
Rockcastle County, KY	16,342	3,591	21.97%	
Kentucky	4,322,881	717,895	16.61%	
United States	318,564,128	40,910,326	12.84%	

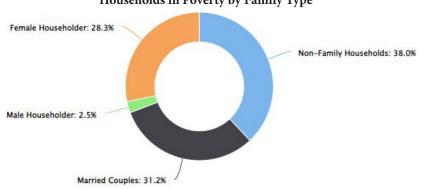
ON 25%
Rockcastle County, KY (21.97%)

United States (12.84%)

Note: This indicator is compared to the state average.

Data Source: US Census Bureau, American Community Survey. 2016-20. → Shaw more details

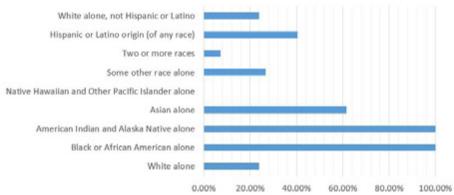
Households in Poverty by Family Type

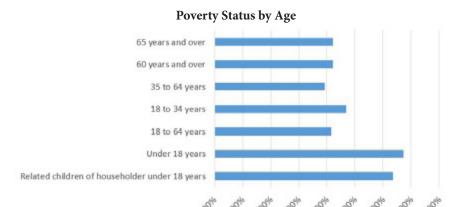


Population in Poverty by Race Alone

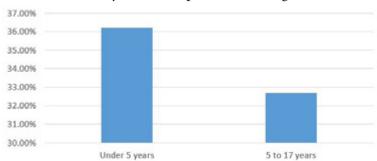
Report Area	White	Black or African American	Native American or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Race
Rockcastle County, KY	19.71%	0.00%	24.37%	100.00%	No data	0.00%	43.04%
Kentucky	16.03%	27.84%	25.37%	14.25%	17.91%	31.15%	26.65%
United States	11.15%	23.04%	24.86%	10.94%	17.51%	21.04%	16.66%

Poverty Status by Race and Ethnicity





Poverty Status of Population below Age 18



Children below Federal Poverty Level

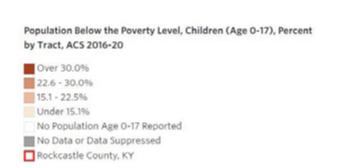
Report Area	Total Population	Population < Age 18	Population < Age 18 in Poverty	Population < Age 18 in Poverty, Percent
Rockcastle County, KY	16,342	3,551	1,108	31.20%
Kentucky	4,322,881	983,940	218,023	22.16%
United States	318,564,128	72,065,774	12,598,699	17.48%



Note: This indicator is compared to the state average.

Data Source: US Census Bureau, American Community Survey, 2016-20. → Show more details





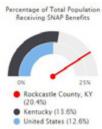


Population Receiving SNAP Benefits

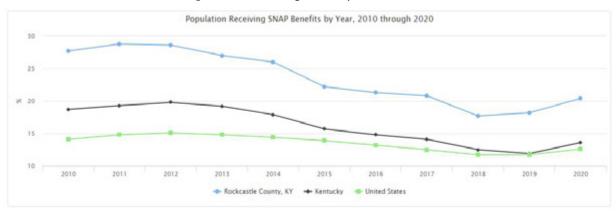
Report Area	Total Population	Population Receiving SNAP Benefits	Population Receiving SNAP Benefits, Percent
Rockcastle County, KY	16,037	3,271	20.4%
Kentucky	4,505,836	611,420	13.6%
United States	331,449,281	41,829,366	12.6%

Note: This indicator is compared to the state average.

Data Source: US Census Bureau, Small Area Income and Poverty Estimates. 2020. → Show more details



Population Receiving SNAP by Year, 2010-2020





NEIGHBORHOOD AND BUILT ENVIRONMENT

The neighborhoods and homes people live in can have a tremendous impact on their health. Many people in the U.S. live in neighborhoods with high rates of violence or drug activity, some may live in an area with unhealthy drinking water, while others may live in overcrowded conditions or in homes that lack kitchen or plumbing facilities. Additionally, some neighborhoods have little to no access to healthy foods or places to get physical activity.

While Rockcastle County has higher rates of home ownership, 76 percent, when compared to both the state and national rates, 68 percent and 65 percent respectively, the quality of housing fares worse. The substandard housing indicator reports the number and percentage of owner- and renter-occupied housing units having at least one of the following:

- 1. Lacking complete plumbing facilities
- 2. Lacking complete kitchen facilities
- 3. With one or more occupants per room
- 4. Selected monthly owner costs as a percentage of household income greater than 30 percent
- 5. Gross rent as a percent of household income greater than 30 percent

The ACS reports that out of 6,609 total households in Rockcastle County, 1,684 or 25.48 percent were considered substandard.

Substandard Housing Conditions Prevalence

5,609	1,684		25.48%	
8,053	432,320		24.73%	0% 50%
4,219	38,476,032		31.45%	 Rockcastle County, KY (25.48%) Kentucky (24.73%)
5	8,053 54,219 e overage.	38,476,032	38,476,032	34,219 38,476,032 31.45%





Number of Substandard Housing Conditions Present

Report Area	No Conditions	One Condition	Two or Three Conditions	Four Conditions
Rockcastle County, KY	72.91%	26.67%	0.43%	0.00%
Kentucky	74.54%	24.35%	1.10%	0.01%
United States	68.09%	30.03%	1.87%	0.01%

SOCIAL AND COMMUNITY CONTEXT

The relationships, interactions, and support a person experiences in life can have a major impact on their overall health and well-being. There are many factors that are outside a person's control, such as unsafe neighborhoods, discrimination, and bullying, which contribute to a person's social and emotional health, as well as their physical safety. The relationships people have at home, work, and school, as well as access to support networks like social programs, can help to insulate them from the negative effects on their health. Interventions to help people get the social and community support they need are critical for improving health and well-being.

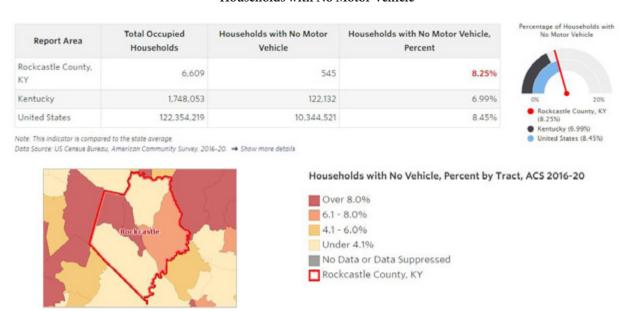
HEALTHCARE ACCESS AND QUALITY

Factors such as distance to a healthcare provider, transportation availability, cultural and social barriers, insurance and ability to pay copays, and age all impact a person's overall health outcomes. For example, if someone who lives in a rural area and does not have access to reliable transportation to see a primary care provider, the likelihood of them receiving important preventive screenings will be decreased. This, in turn, increases their risk of developing chronic health conditions like heart disease or stroke, or it may mean that they do not catch diseases, like cancer, in their early stages when they are more easily treated.

TRANSPORTATION

The ACS reported for Rockcastle County that out of 6,609 total households, 545 or 8.25 percent are without a motor vehicle.

Households with No Motor Vehicle



INSURANCE

The HHS reports that one in ten people in the U.S. don't have health insurance. Those without health insurance are less likely to have a primary care provider, less likely to get important preventive health screenings, and less likely to receive important medications necessary to manage chronic conditions.

Uninsured Population

Report Area	Total Population (For Whom Insurance Status is Determined)	Uninsured Population	Uninsured Population, Percent	Uninsured Population, Pero
Rockcastle County, KY	16,487	635	3.85%	ON 25N
Kentucky	4,379,339	246,078	5.62%	 Rockcastle County, K (3.85%)
United States	321,525,041	28,058,903	8.73%	 Kentucky (5.62%) United States (8.73%)

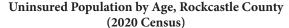
Note: This indicator is compared to the state average.

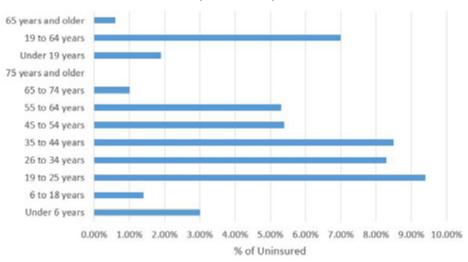
Data Source: US Census Bureau, American Community Survey. 2016-20. → Show more details



Uninsured Population by Race

Report Area	Non-Hispanic White	Black or African American	Native American or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Some Other Race	Multiple Race
Rockcastle County, KY	4,43%	0.00%	0.00%	0.00%	No data	0.00%	59.49%
Kentucky	4.85%	6.39%	8.82%	8.82%	17.37%	34.07%	5.41%
United States	5.94%	10.07%	19.23%	6.73%	10.63%	20.38%	7.67%





OLDER ADULTS

As individuals age, their healthcare needs change and they sometimes experience new barriers to receiving healthcare than they did when they were younger. This is an important factor to consider since Rockcastle County is a rural area and most rural areas have a higher percentage of an aging population.

The older a person gets, the more likely they are to develop a chronic condition, and sometimes multiple chronic conditions that require specialists to help them manage these diseases.

Many older adults struggle with navigating the ever-changing healthcare system. The HHS estimates that eight in ten older adults struggle to use medical documents, such as form or charts. From aging into Medicare from private insurance, to filling out medical forms, to understanding complex medical information discussed with their healthcare provider, all of these are challenges older adults face which can affect their overall health.

Community Health Services & Resources

In addition to RHRCC, other local organizations whose missions are related to health and well-being include:

ADULT DAY CENTERS

Rockcastle County has two adult day care facilities which are both located within the city limits of Mount Vernon. Rockcastle Senior Citizens and Adult Day Health provide meals, personal care, wound care, recreational activities, and Meals on Wheels for homebound residents. Similar services, not including Meals on Wheels, are provided by Wayne Stewart Adult Health.

BEHAVIORAL HEALTH AND SUBSTANCE USE

Some of the community's major health concerns are substance use and mental illness. There are no inpatient facilities in Rockcastle County for the treatment of psychiatric-related conditions.

Cumberland River Comprehensive Care Center (CRCCC) is a community-based, not-for-profit organization providing services in mental health, developmental delay, intellectual disabilities, and chemical dependency for eight Southeastern Kentucky counties, including Rockcastle County. CRCCC provides outpatient substance use and mental health services for residents of Rockcastle County of all ages. It is one of 14 regional comprehensive care centers established by the Kentucky legislature to provide mental, substance use, and mental retardation-related services. Services can be provided in a variety of settings, from individual, couple, marital, family or group counseling for mental health and substance use issues, to referral services for inpatient hospitalization. CRCCC offers sessions with counselors, as well as with a peer support specialist, if needed, and a variety of opportunities for adults and children with developmental delay/intellectual disabilities.

The facility accepts private insurance, worker's compensation, Medicaid, and Medicare. CRCCC has a sliding fee scale available to those without third party payment. On staff are two part-time psychiatrists, a nurse practitioner certified in mental health, psychiatric nurse, licensed mental health professionals, a therapeutic rehabilitation day program for individuals with mental health needs, as well as an adult day training program for individuals with developmental delays. Case management is offered for qualifying individuals to assist with the negotiation of community resources. Children and their families are provided services in both the school and clinic settings. Regionally, crisis stabilization residential services and inpatient substance use services are available through the referral process. Also available is a 24-hour crisis hotline, which is able to respond in emergency situations.

There are several faith-based recovery programs available throughout the county. These 12-step programs address a variety of addictions. There is one Alcoholics Anonymous meeting hosted weekly at a local church.

Another option for the treatment of substance use involves Operation UNITE, an acronym for the Unlawful Narcotics Investigations, Treatment, and Education, Inc. It is a non-profit corporation that serves the 32 counties of the Fifth Congressional District, including Rockcastle. In addition to law enforcement and education components, UNITE also coordinates inpatient treatment for substance users. Those meeting eligibility requirements may call UNITE and request treatment. If they qualify, they are referred to one of 20 treatment facilities (most in Kentucky), for what is typically a 90-day inpatient program, and UNITE assumes the cost of the treatment.

CABINET FOR HEALTH AND FAMILY SERVICES

The Kentucky Cabinet for Health and Family Services has three offices in Rockcastle County: The Office of Family Support, The Office of Protection and Permanency, and Child Support Enforcement. Each of these offices provide a wide range of services, including child/adult abuse and neglect; assistance with food stamps, welfare, and Kentucky Medicaid; and child support enforcement.

DENTAL

White House Clinic offers dental services, in addition to a separate specialty office, Mount Vernon Dentures and Partials. A mobile dental clinic typically visits all of the county's schools each year, primarily providing cleaning, cavity screening, and other services such as fillings.

DURABLE MEDICAL EQUIPMENT

There is one durable medical equipment provider, Collins Respiratory Care, that serves the entire county.

EMERGENCY SERVICES

The Rockcastle County Emergency Medical Service (EMS), a private, non-profit organization that offers both Basic Life Support (BLS) and Advanced Life Support (ALS) and makes between 3,000 and 3,500 runs annually, provides emergency services. Many of those runs are related to respiratory distress and cardiac events, mostly in patients over the age of 50. It has been estimated that 50 percent of the EMS trauma runs result from traffic accidents on Interstate 75.

FOOD INSECURITY

In addition to Christian Appalachian Project's Grateful Bread, several local churches in the county either house a food pantry or provide free meals to the community on a monthly basis.

HEALTH DEPARTMENT

Cumberland Valley District Health Department is located in Mount Vernon and provides the following services

- Cancer screenings
- Chronic disease screening
- Diabetes self-management education and support group
- Family planning
- Folic acid counseling and supplementation
- HIV testing and counseling services
- Immunizations
- Medical nutrition therapy
- Phenylketonuria (PKU) screening
- Preconception care/counseling
- Preventative healthcare screenings
- Sexually transmitted disease diagnosis, treatment, and follow-up
- Women, Infant, and Children (WIC) Program

HOME HEALTH

Lifeline Home Health, in partnership with RHRCC, and Cumberland Valley Home Health, a part of the Cumberland Valley District Health Department, are the two home health agencies in Rockcastle County. Both provide home care – which might include a range of services from respite to palliative care – by nurses, therapists, social workers, and home health aides.

HOUSING STABILITY

In addition to Christian Appalachian Project, Daniel Boone Action Agency offers a range of services to address needs of county residents, including heating assistance, emergency food and shelter, and tenant-based rental assistance.

NURSING HOME

Rockcastle Health and Rehabilitation, a 104-bed nursing home in Brodhead, Kentucky, serves the entire county. Its clinical team includes a full-time registered dietitian, respiratory therapist, dedicated wound care nurse, mental health counselor, nurse practitioner, and clinical support staff. Clinical services for its residents include a 24-hour on-call physician; geriatric/psychiatric nurse practitioner; physical, occupational, and speech therapies; wound care; cardiac care; diabetic care; hospice care; therapeutic recreation; psychosocial intervention; behavior health program management; and podiatry, dental and optometry services.

OPTOMETRY

There is one eye clinic housing two part-time optometrists in the county.

PHARMACY

There are four retail pharmacies in the county, including RHRCC's Rockcastle Professional Pharmacy. Three of the pharmacies are located in Mount Vernon and one is located in Brodhead.

PRIMARY CARE

White House Clinic – Mount Vernon is a division of White House Clinics, which is a 501(c)3 non-profit corporation. Its clinics are Federally Qualified Health Care Centers which receive federal funding to offset costs for uninsured and low-income patients. Their physicians are supported by nurse practitioners, physician assistants, licensed clinical social workers, and other healthcare professionals. White House Clinics offer on-site dental, pharmacy, laboratory, mammography, and x-ray services.

Additionally, Rockcastle River Family Health Clinic is located in Livingston and is staffed by a nurse practitioner, providing family health services to patients of all ages.

ROCKCASTLE COUNTY SCHOOLS

The Rockcastle County School Health Services provides first aid care to students and employees who become sick or injured at school. Health Services also maintains the health records required by the Department of Education and does health screenings for the students. There is one BSN-RN district nurse for the school system. Each school within the system has either a LPN or CMA under the supervision of the principal and district school nurse. The district RN oversees the health services provided by nursing staff; advises the health assistants; monitors the students' health records; helps with vision, hearing, and scoliosis screening; and provides mini-health lessons, as needed.

The Rockcastle County School system has a school services agreement with RHRCC through its pediatric and adolescent practice, RockPeds, to provide telehealth services to students while at school. They are able to diagnose and treat common illnesses while the student stays at school, eliminating the need for the parent or guardian to take off work or for the child to leave school in order to be seen by a provider. This program has been in place since October 2019.

SOCIAL ASSISTANCE

The Christian Appalachian Project is an interdenominational, non-profit Christian organization committed to serving people in need in Appalachia by providing physical, spiritual, and emotional support through a wide variety of programs and services.

The organization has facilities in Rockcastle County and serves the county in a variety of ways:

- Housing helps families find a more healthful environment to live in.
- Elderly housing focusing on age 60 and older for items such as ramps, windows, and insulation.
- Elderly services provides socialization for the elderly; home visits; transportation to the doctor, grocery, etc.; helps those individuals maintain independence.
- Prescription assistance helps low-income individuals of all ages afford their medication.
- Emergency assistance helps individuals whose homes have burned, utilities shut off, and more.
- In-home respite helps keep families intact and not having to rely on nursing homes, provides mental and physical respite for caregivers.
- Family life child development health and wellness is included in preschool curriculum, nutritious meals provided according to federal guidelines, home visitors work with children that may have developmental delays.
- Counseling mental health and well-being therapy is provided.
- Grateful Bread a food pantry that provides food to low-income households and community awareness and education.
- Grateful Threads a gently-used clothing store with low-cost clothes for all ages.
- Family advocacy small farms and gardens help people plan, afford, and start gardens, as well as grow and preserve their own nutritious food.

TRANSPORATION

Rural Transit Enterprises Coordinated, Inc. (RTEC) is a non-profit corporation headquartered in Mount Vernon, which provides community transit services to a 12-county area, may provide low- or no-cost transportation to get healthcare eservices.



RHRCC's strategic priorities developed as a result of the 2019 Community Health Needs Assessment (CHNA) focused on four areas. Below is a summary of progress made in each of those areas.

Priority 1: Cancer and Prevention

RADIATION SERVICES

It was determined during the 2019 CHNA that adding radiation services was not feasible within the three-year period following the CHNA. Leadership has continued to monitor this feasibility and has determined it is still not feasible, at this time.

128-SLICE CT MACHINE

A goal was set to upgrade to a 128-slice CT machine with specific oncology platform to assist with earlier detection, evaluation and management, and follow-up care within the three years following the CHNA.

RHRCC installed a Siemen's 128-slice CT scanner in January 2022, including an oncology software module for improved diagnosis, staging, and follow-up assessment and monitoring, as it provides:

- High level of automation and quantification with unique processing functionality
- · Automated segmentation and evaluation of lesions in lung, liver, lymph nodes, and other organs
- Automatic calculation and measurements of tumors, growth rates, tumor burden, and tumor doubling time

PREVENTION AND EDUCATION

The 2019 Implementation Strategy set out key objectives to achieve over the next three-year cycle, which focused on continuing to expand prevention, and education services through community outreach programs as identified by the cancer committee. These objectives were broken down into two initiatives: prevention and screening.

PREVENTION INITIATIVES

Smoking/Tobacco/Vaping Cessation

- Participated in National Commission on Cancer "Just Ask" and "Beyond Ask" Improvement Projects and Clinical Studies.
- Established a goal to increase and improve the integration of smoking assessment as a standard of care by asking all newly diagnosed cancer patients about smoking, report results, and advise of smoking cessation resources.
- Tobacco Treatment Specialist was embedded in oncology clinic to see all patients identified as tobacco users and follow-up with all those actively attempting tobacco cessation.
- Conducted cessation programs to the community and educational presentations to the local middle and high schools.

Event/Program	Type of Activity	Target Audience	Participants	Date
Freedom From Smoking	Tobacco Cessation	Community	12	2020
Freedom From Smoking	Tobacco Cessation	Community	16	2022
Tobacco Education in the Schools	Prevention/Cessation	Middle through High Schools	825	2020
Tobacco Education in the Schools	Prevention/Cessation	Middle through High Schools	203	2021
Tobacco Education in the Schools	Prevention/Cessation	Middle through High Schools	8	2023



Prevention Education

Numerous educational outreach events were conducted during the three-year cycle that focused on cancer prevention, including topics on nutrition, physical activity, weight loss support. The COVID-19 pandemic severely limited the organization's ability to conduct as many in-person events as originally outlined in the 2019 Implementation Strategy; however, whenever possible, virtual educational offerings were made available and in-person events were conducted, when safe to do so.

Event/Program	Type of Activity	Target Audience	Participants	Date
Countywide Stride Race Series	Physical Activity	Community	1016	2020
Healthy You	Education/Support Group	Pre-diabetes	265	2020
Eat, Drink, & Be Healthy	Education/Support Group	Seniors	80	2020
Silver Sneakers	Physical Activity	Seniors	464	2020
Wellness Center	Physical Activity	Community	782	2020
Jump Rope Club	Physical Activity	Kids (FRYSC Enrichment)	126	2020
Rockin' Kids Fit Marathon	Physical Activity	Kids	21	2020
Countywide Stride Race Series	Physical Activity	Community	905	2021
Kiwanis Club Presentation: Diabe	Education	Community	4	2021
Countywide Stride Race Series	Physical Activity	Community	731	2022
Longest Day of Play	Physical Activity	Kids	608	2022
Countywide Stride Race Series	Physical Activity	Community	846	2023
Longest Day of Play	Physical Activity	Kids	434	2023
Kids Health & Safety Fair	Kids Health/Physical Activity	Kids & Parents	146	2023
MVES Open House	Childhood Obesity	Kids & Parents	700	2023
Mobile Health Clinic	Free A1C Screenings	Community	15	2023
Rock Moves	Physical Activity	High School Students	50	2023
Healthy You	Education/Support Group	Pre-diabetes	96	2023

Educational and screening initiatives were also conducted to convey the importance of the avoidance of sun exposure. One such educational event was at the Longest Day of Play where, each year, the cancer care team hosts a booth sharing education on sun safety, skin cancer prevention tips, and other information related to sun exposure. Additionally, in September 2023, Rockcastle Regional's Mobile Health Clinic was launched with its first outing at the Woodstock Community Center where a board-certified plastic surgeon provided 50 free full-body skin cancer screenings and skin cancer prevention education and resources.

SCREENING INITIATIVES: BREAST, LUNG, AND COLON

Breast

In 2019 and early 2020, RHRCC enhanced mammography services and improved the quality of care by upgrading to a 3D mammography machine with images read by a breast radiologist at UK HealthCare.

Lung

The organization has continued its growth of the robust low-dose CT lung cancer screening program. Each year, the number of patients screened has steadily increased:

- 2020: 351
- 2021: 426
- 2022: 476
- 2023: 528

In November 2023, the organization participated in the second annual National Lung Cancer Screening Day where Saturday appointments were made available for those patients who might struggle to take off during the week to get their screening.



Colon

Each March during National Colon Cancer Awareness Month, the organization has offered free fecal occult blood tests (FOBTs) to the community as a screening option for colon cancer; however, the participation rate has always been near or at zero. In 2023, the initiative was enhanced by partnering with local pharmacies to serve as pick-up locations for the FOBT kits with the objective of targeting a more interested and engaged population. A social media campaign was launched simultaneously to promote the convenience of the screening and the importance of catching colon cancer early through easy screening tools, like the FOBT. The targeted population was men and women, ages 45 and older, within a 30-mile radius of Mount Vernon. The campaign was a tremendous success with 23 kits returned and no negative findings.

ENHANCED SURVIVORSHIP PROGRAM

A goal was established to enhance the existing survivorship program to be inclusive of rehabilitation services, physical activity programs, nutritional services, and support groups.

Rehabilitation and Physical Activity Programs

Oncology rehabilitation and "Medbridge At Home" exercise plans are tailored to the patients' needs. Rehabilitation services available to cancer patients and survivors through the oncology rehab program include:

- Physical Therapy: strength, conditioning, balance, gait, pain management, fatigue, and home exercise programs
- Occupational Therapy: activities of daily living, adaptive equipment, stress management, energy conservation, lymphedema management
- Speech Language Pathology: speech, cognitive therapy, and swallowing
- Assist with daily operations, such as patient ambulation and patient transfer issues

COMMISSION ON CANCER ACCREDITATION

The 2019 Implementation Strategy set forth a goal to have continued compliance with the latest quality of care standards through successful Commission on Cancer Accreditation. The organization was successfully reaccredited on April 20, 2022 with no deficiencies identified. The next survey is scheduled to occur in Spring 2025.

ADDITIONAL HIGHLIGHTS

In addition to all the progress made towards the goals outlined in the 2019 Implementation Strategy, there are many highlights the organization has achieved over the last three-year cycle towards the improvement of cancer care and prevention.

One such achievement was the implementation of the OncoLens platform in 2022 to optimize communication and decision making for patients presented in cancer conferences/tumor boards.

Another project of note was the enhancement of pharmacy services through oncology pharmacy videos and handouts created for patient education on commonly asked questions related to chemotherapy drugs, their side effects, and how to manage them to supplement pharmacy consultations.



Priority 2: Education Services/Patient Navigation

When the 2019 Implementation Strategy established the goal to revitalize the launch of "Eat, Drink, and Be Healthy" "post-COVID," the pandemic had only started and the full realization of its impact on the healthcare system and limiting of in-person outreach events had not been made. In January and February of 2020, the program was re-launched and then forced to cancel classes due to the pandemic. However, in March 2023, the "Healthy You 101" diabetes prevention and weight loss support program was relaunched with in-person meetings.

In terms of patient navigation, the 2019 CHNA identified the barrier within the community of a lack of knowledge of local community health resources. The Implementation Strategy set forth the goal of collaborating with the Rockcastle Healthy Communities Coalition to create a comprehensive community health resource guide to be disseminated in both print and digital forms throughout the community. As with many other community groups during the pandemic, the Rockcastle Healthy Communities Coalition ceased in-person meetings, thus making the collaboration on this project too difficult to overcome. The organization solely worked to create this comprehensive guide in April 2023 and began disseminating it throughout the community, as a referral source tool by the organization's case manager, as well as posting it digitally on RHRCC's website on October 12, 2023.



Priority 3: Mental Health/Substance Use

Great strides were made towards improving access to mental health services and substance use disorder during the past three-year cycle. Chasity Frakes, APRN, FNP-C, PMHNP-BD, returned to practice on August 31, 2022 as a psychiatric-mental health nurse practitioner (PMHNP-BD), joining the existing Behavioral Health team of a psychiatrist, three counselors, and a registered nurse. Additionally, Brent Hasty, previously a certified social worker, completed his coursework to become a licensed clinical social worker (LCSW) on October 23, 2022.

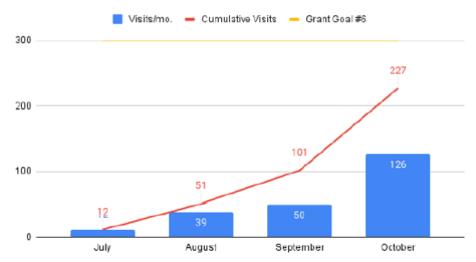
Educational outreach offerings were made available to the community in both digital and in-person (when possible) formats due to the in-person constraints of the COVID-19 pandemic.

- ROCK Talks: Dr. Callie Shaffer, pediatrician, "Children's Mental Health During COVID-19" made available digitally on January 14, 2020
- ROCK Talks: Dr. Kelsey Ladd, psychiatrist, "Managing Stress and Anxiety During COVID-19" made available digitally on March 25, 2020
- Dinner with the Doctor: Dr. Callie Shaffer and Dr. Kelsey Ladd, "Children's Behavioral Health" conducted as an in-person event on December 1, 2021.

Possibly the most impactful initiative conducted was not outlined in the 2019 Implementation Strategy, yet has made a remarkable impact on the lives of youth and their families in Rockcastle County. In June 2023, the organization partnered with Rockcastle County Schools to provide a dedicated team of school-based behavioral health professionals, physically housed within the school buildings, themselves. Two licensed clinical social workers (LCSWs) and one patient navigator were hired to provide on-site behavioral health therapy sessions to students, as well as provide education to school staff on Adverse Childhood Experiences (ACEs).

During the short time this program has been in operation, it has uncovered the tremendous need for behavioral health services for students and has shown the high demand for an increase in these services.





The launch of the program was primarily grant-funded; however, the organization's leadership is committed to its sustainability.

Priority 4: Diabetes and Obesity

The goal outlined in the 2019 Implementation Strategy included the continuation of many of the organization's popular programs, such as the fitness center, wellness center classes, the County-wide Stride Run/Walk Series, and Healthy You 101. As with so many other in-person events and programs during the pandemic, many of these were simply not safe to conduct during this past three-year cycle. As of the end of 2023, the fitness center and the wellness center classes have yet to be reopened to the community. Throughout the duration of the pandemic, the County-wide Stride Run/Walk Series continued, switching to virtual races when safest to do so.

Healthy You 101 was re-launched in March 2023. It is a program focusing on the prevention of diabetes and pre-diabetes and offers weight loss support to participants. This is a yearlong program where classes meet weekly for the first six months, then monthly for the last six months. Its curriculum is founded on the evidence-based guidance from the Centers for Disease Control and Prevention (CDC) and certified Lifestyle Coaches facilitate it.

Diabetes and Obesity Outreach Programs Conducted, 2020-2023

Event/Program	Type of Activity	Target Audience	Participants	Date
Countywide Stride Race Series	Physical Activity	Community	1016	2020
Healthy You	Education/Support Group	Pre-diabetes	265	2020
Eat, Drink, & Be Healthy	Education/Support Group	Seniors	80	2020
Silver Sneakers	Physical Activity	Seniors	464	2020
Wellness Center	Physical Activity	Community	782	2020
Jump Rope Club	Physical Activity	Kids (FRYSC Enrichment)	126	2020
Rockin' Kids Fit Marathon	Physical Activity	Kids	21	2020
Countywide Stride Race Series	Physical Activity	Community	905	2021
Kiwanis Club Presentation: Diabe	Education	Community	4	2021
Countywide Stride Race Series	Physical Activity	Community	731	2022
Longest Day of Play	Physical Activity	Kids	608	2022
Countywide Stride Race Series	Physical Activity	Community	846	2023
Longest Day of Play	Physical Activity	Kids	434	2023
Kids Health & Safety Fair	Kids Health/Physical Activity	Kids & Parents	146	2023
MVES Open House	Childhood Obesity	Kids & Parents	700	2023
Mobile Health Clinic	Free A1C Screenings	Community	15	2023
Rock Moves	Physical Activity	High School Students	50	2023
Healthy You	Education/Support Group	Pre-diabetes	96	2023



METHODOLOGY

The 2023 CHNA research included qualitative primary source research methods and secondary sources to determine health trends and disparities affecting the residents of Rockcastle County. The steering committee used a priority ranking system to create the 2023 CHNA community survey, which was disseminated throughout the community. After all survey data was obtained, the steering committee reviewed and analyzed that data, along with the secondary source data, and through a series of ranking exercises, developed a profile of priority areas to best address the health disparities identified. This profile will guide the organization's healthcare services and improvement efforts over the next three years.

The following research methods were used:

- An analysis of secondary data sources, including public health statistics, publicly available census data, and healthcare
 utilization data from the state and national hospital associations.
- A community survey, which was available by both paper and electronic means. A paper copy was mailed to every household
 and post office box in Rockcastle County. The electronic version was made available on the hospital's website and social media
 platforms, as well as promoted throughout the community through a QR code.
- A stakeholder survey was electronically disseminated to community, business, public health, civic leaders, and educators throughout the community. It was also made available to leaders within the organization, as well as direct care providers in both the inpatient and outpatient settings.
- A provider survey was electronically shared with the healthcare providers from within the organization, as well as to those from other healthcare provider organizations within the community.



COMMUNITY SURVEY AND RESULTS



2023 Community Health Needs Assessment Survey

A t Rockcastle Regional Hospital and Respiratory Care Center, we want to deliver the best care we possibly can. To better understand the needs of our community, we are asking you to complete this anonymous survey and send back to us in the postage-paid envelope. Or you and other members of your family can complete the survey online at: https://www.surveymonkey.com/r/RRHCHNA1 or scan the QR at right.

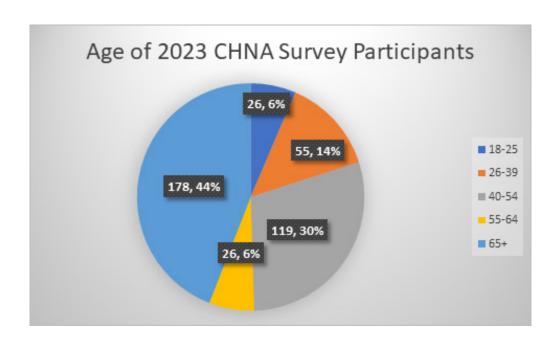


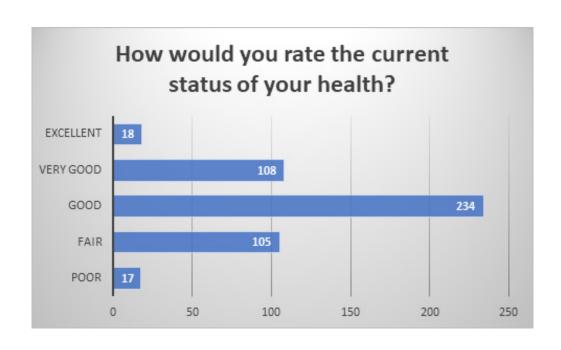
1.	. What is your age: 18-25 26-39 40-54 55-64 65+						
2.	How would you rate the current status of your health? ☐ Poor ☐ Fair ☐ Good ☐ Very Good ☐ Excellent						
3.	Please select the top FIVE health challenges you or your immediate family members face (select up to 5):						
	 ☐ Alcohol overuse ☐ Alzheimer's or dementia ☐ Arthritis ☐ Asthma/breathing problems ☐ Availability of healthy food 	☐ Dental ☐ Diabetes/sugar levels ☐ Heart disease ☐ High blood pressure ☐ Homeless/lack of housing	☐ Overweight/obesity ☐ Prenatal and infant care ☐ Sexually transmitted infections ☐ Stroke ☐ Smoking/tobacco use				
	 ☐ Cancer ☐ Childhood obesity ☐ Colon polyps ☐ Contagious disease (COVID-19) ☐ Cost of healthcare 	☐ Infectious disease ☐ Kidney disease ☐ Liver disease ☐ Lung disease ☐ Mental health issues	☐ Substance abuse/addiction ☐ Vaping ☐ Teen vaping ☐ I do not have health challenges ☐ Other:				
4.	Have you been told by a doctor, nurse,		have one or more of the following				
	chronic illnesses? (select all that apply) ☐ Arthritis ☐ At risk for stroke/heart attack ☐ Asthma ☐ Cancer	☐ Chronic kidney disease☐ Diabetes☐ High blood pressure☐ High cholesterol	☐ Lung disease ☐ Overweight/obesity ☐ Other:				
5.	If over 50, have you had a colonoscopy						
	☐ Yes ☐ No ☐ Not applicable ☐ If i	no, why not?					
6.	If over 50, are a current or former smoker (last 15 years), and have a smoking history of 20-pack years, have you had a low-dose CT lung cancer screening?						
7	☐ Yes ☐ No ☐ Not applicable ☐ If no, why not? If you are a female over 45, have you had a mammogram?						
′.							
8.	☐ Yes ☐ No ☐ Not applicable ☐ If no, why not? If you are a female between 21 and 65, have you had a recent cervical cancer screening (i.e. pap test screening)?						
٠.	☐ Yes ☐ No ☐ Not applicable ☐ If no, why not?						
9.	If you are a male over 50, have you had a PSA screening?						
		no, why not?					
10.	Which of the following preventive pro-						
	☐ Blood pressure screening ☐ Cardiovascular screening ☐ Cholesterol screening	☐ Dental cleaning/exam ☐ Flu vaccine ☐ Hepatitis A/B/C/HIV screening	☐ Physical exam/Well-check ☐ RSV vaccine				
11.	11. Have you received the most recent COVID-19 vaccine?						
	☐ Yes ☐ No ☐ If no, why not?						



	What, if any, of the following treatmen used over the last 12 months? (select al		s for substance us	se disorde	ers or mental health have yo
	☐ Primary care provider	☐ Faith-based lea	der	□ Other	:
	☐ Counselor/therapist	(priest/pastor			d benefit from these
	☐ Psychiatrist	☐ Support groups			vices but haven't
	☐ Medically-assisted treatment	☐ Emergency Ro			en't needed to use
	☐ Religious associations	☐ Peer-led progra		□ I Have	are needed to use
3. 1	Do you use any of the following?			cigarettes	□No
	Have you or an immediate family mem			_	
	Were you aware Rockcastle Regional o				
5	schools? Yes No				
6. (Of the list below, what are the top FIV			-	
	☐ Alcohol overuse	☐ Cost of healthc	are		al health issues
	☐ Alzheimer's or dementia	☐ Dental			weight/obesity
	☐ Arthritis	☐ Diabetes/sugar	levels		tal and infant care
	☐ Asthma/breathing problems	☐ Heart disease			lly transmitted infections
	☐ Availability of healthy food	☐ High blood pre		☐ Stroke	
	☐ Cancer	☐ Homeless/lack		☐ Smoking/tobacco use	
	☐ Childhood obesity	☐ Infectious disea			ance abuse/addiction
	☐ Child abuse/neglect	☐ Kidney disease		☐ Vapin	
	☐ Colon polyps	☐ Liver disease		☐ Teen	1 0
	☐ Contagious disease (COVID-19)			□ Other	
1/.	Which of the following do you think is		-		
	□ Alcohol □ Marij		☐ Methamphetar		☐ Teen vaping
	☐ Cocaine ☐ Heroi	n	☐ Prescription D	rugs	☐ Other:
8.	What do you believe are the top FIVE	current weaknesse	es of our commun	ity? (selec	ct up to 5)
	☐ Access to parks and recreation	☐ Clean and safe	streets	☐ Physic	cally active community
	☐ Access to healthy, affordable	☐ Diversity and c	ulture	☐ Pover	ty
	food	□ Education		☐ Safe a	nd affordable housing
	☐ Access to transportation	☐ Engaged comm	nunity	☐ Other	:
	☐ Availability of healthcare	☐ Homelessness			
	☐ Availability of mental health	☐ Growing and e	volving		
	services	community			
9.]	Do people in our county have difficulty				
	☐ Access to safe walking &	☐ Drug/alcohol			assistance
	physical activity	☐ Health educat		☐ Reha	bilitation after surgery/
	☐ Child care	☐ Medical care		inju	-
	☐ Dental care	☐ Pharmacy serv		☐ Hous	ing
	☐ Emergency medical care/	☐ Mental health	services		hy water
	911 services	□ Transportation	n to healthcare	☐ Other	:
20. /	Are there any issues that prevent you f	rom accessing care	e? (select all that a	apply)	
	□ Cannot take off work		□ Lack of availal		
	☐ Child care		□ Lack of trust i	n the me	dical community
	□ Cultural/religious beliefs		☐ No insurance		
	□ Don't know how to find a medic	al provider	☐ Only visit who	en sometl	ning is seriously wrong
	☐ Fear (not ready to face/discuss)		☐ Transportation	n	
	☐ Fear/anxiety of being judged		☐ I have no issue		ng care
	☐ Inconvenient physician hours		☐ Other:		
21. \	What other healthcare services are nee	ded locally to bet	ter address the he	alth prob	lems in Rockcastle County
1	for the next two years?				

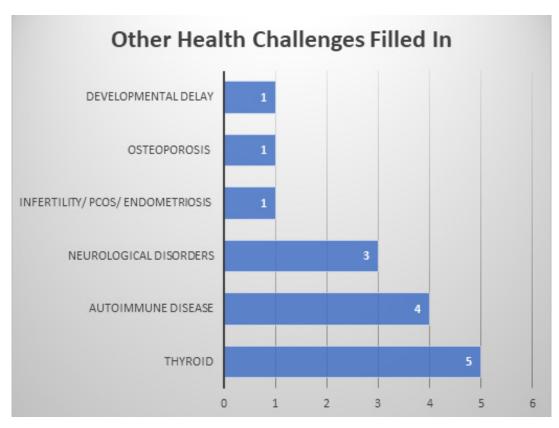




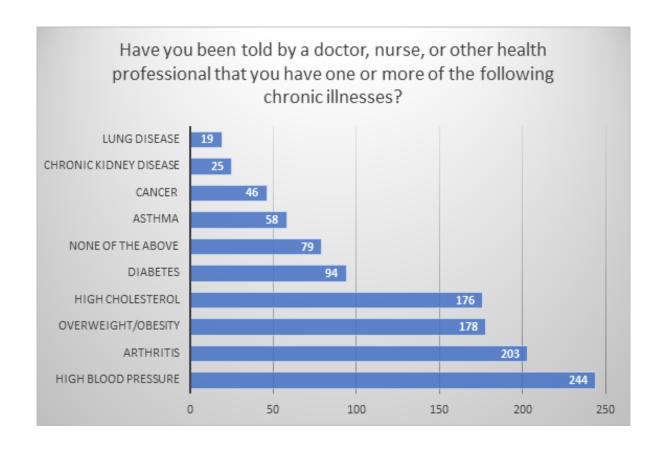


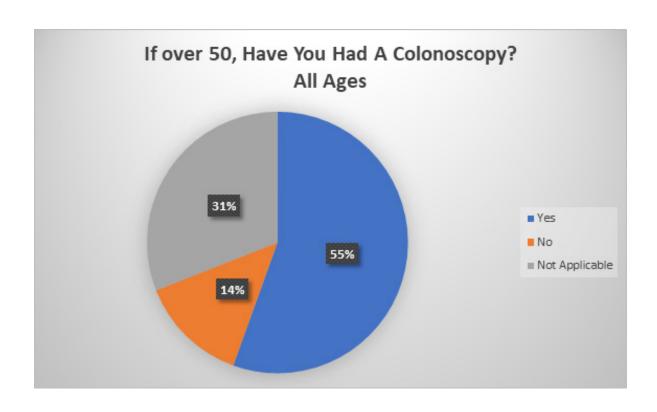


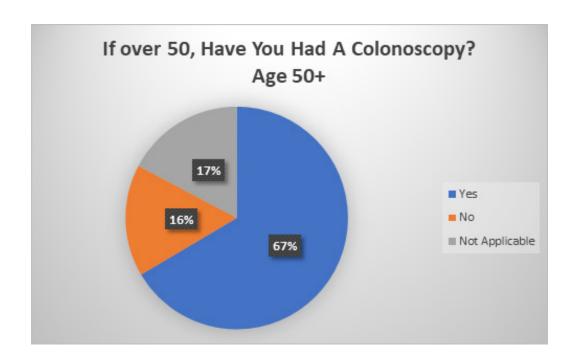


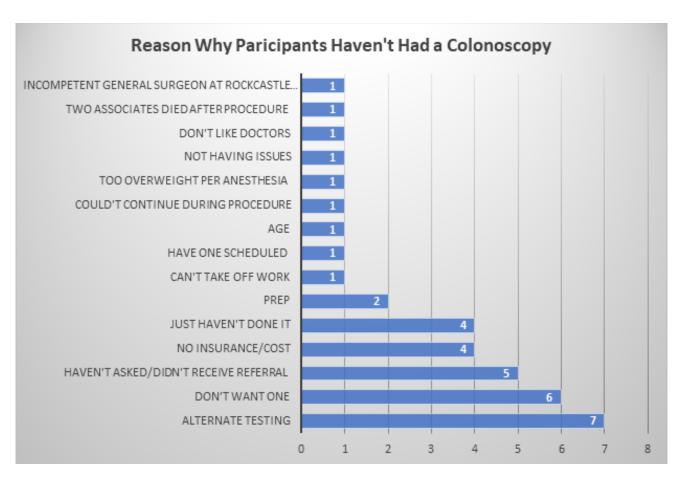




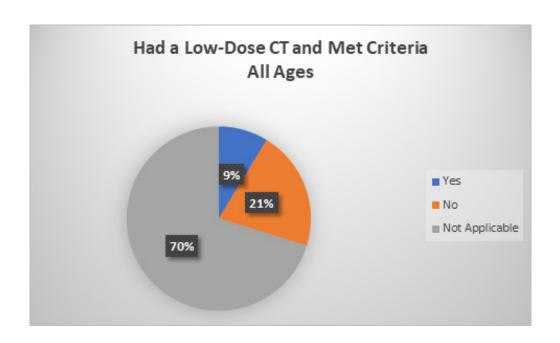


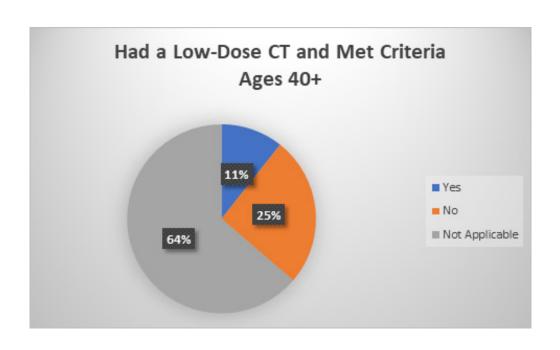




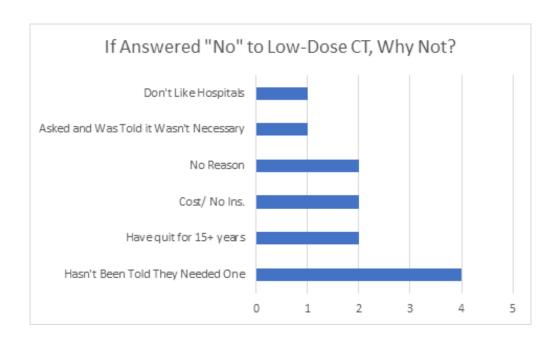


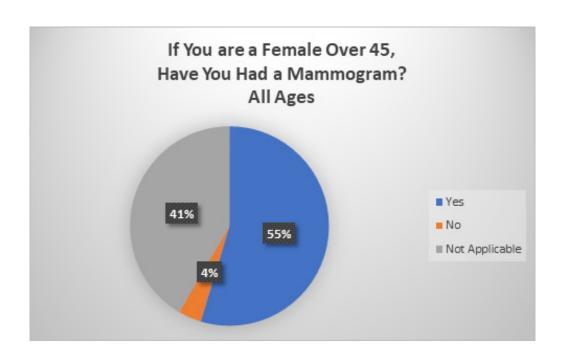


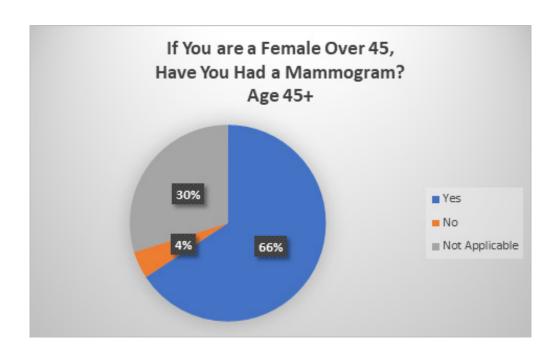


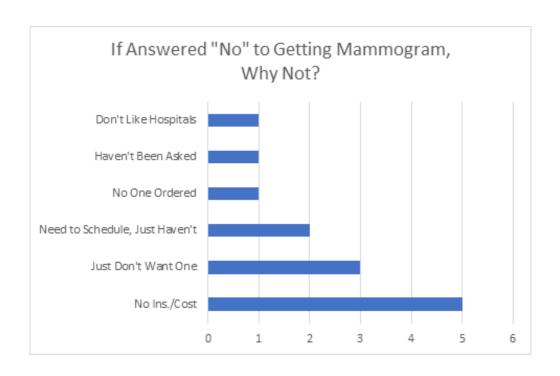


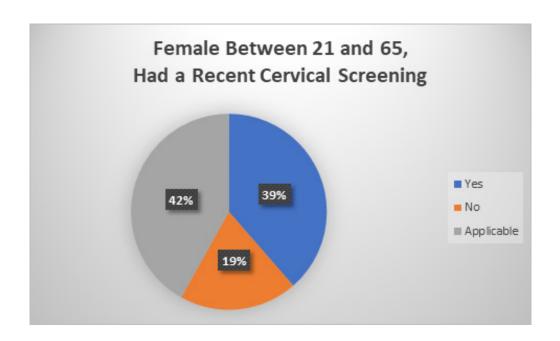


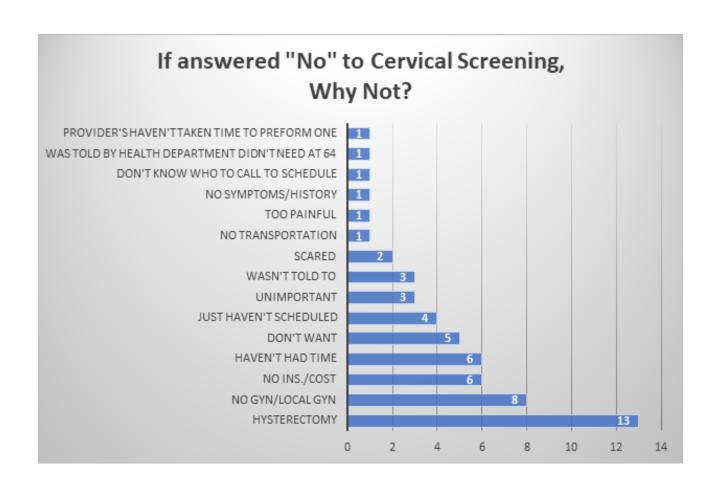




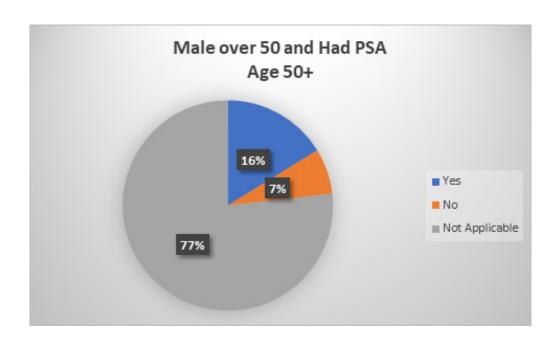


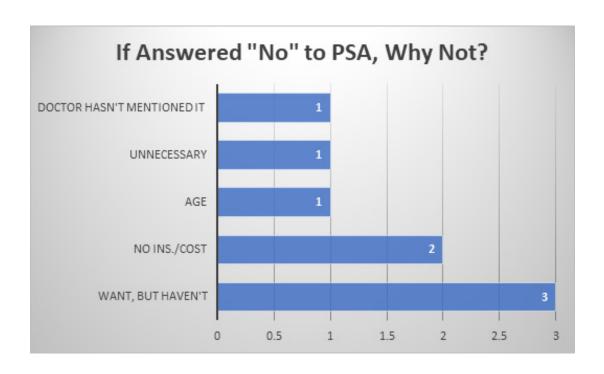




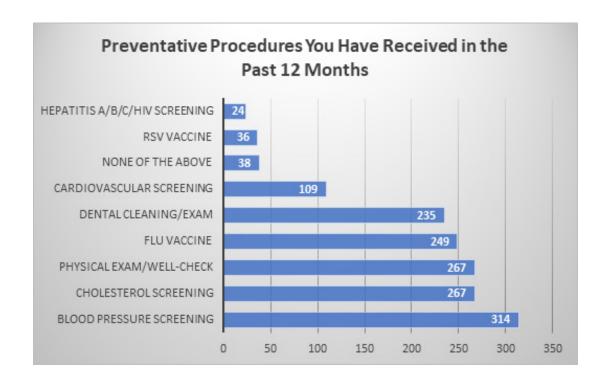


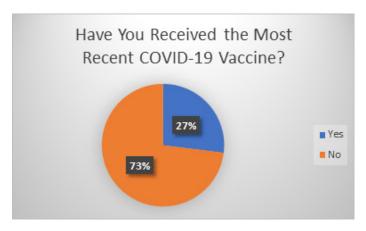


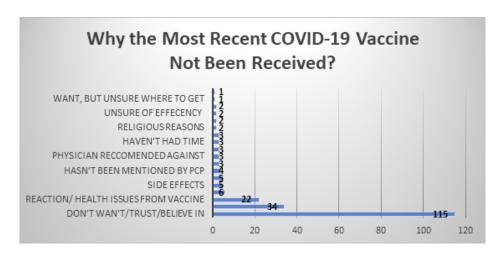




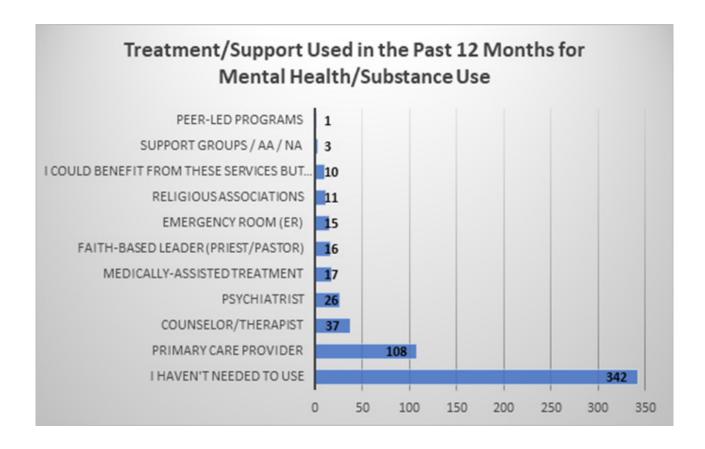


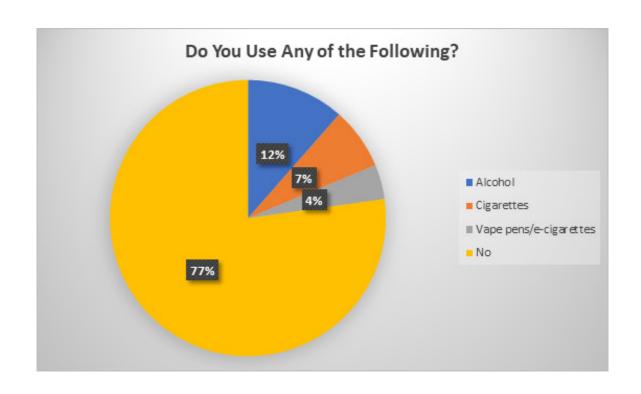






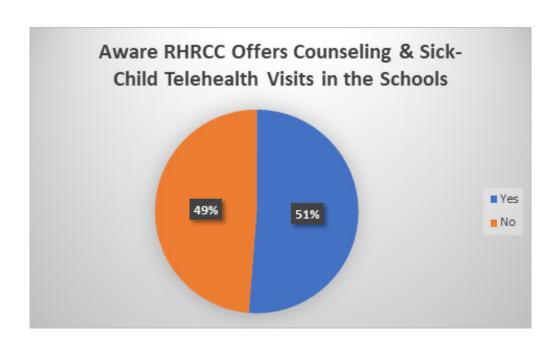




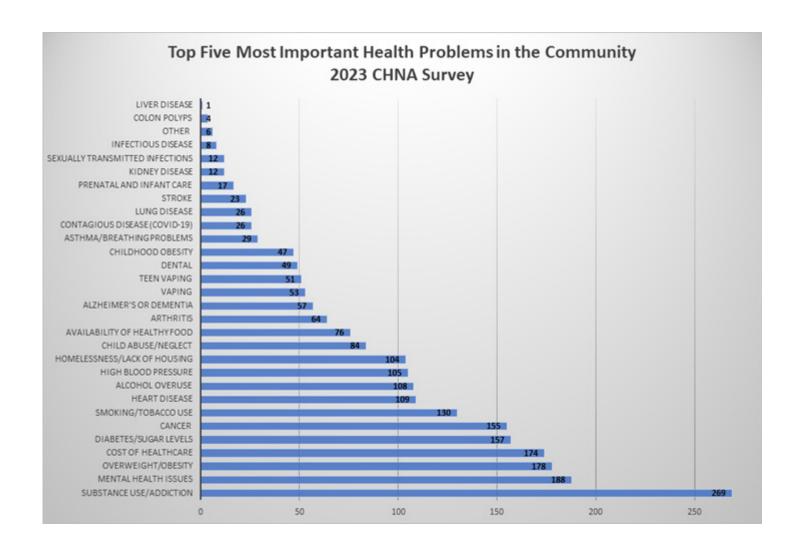


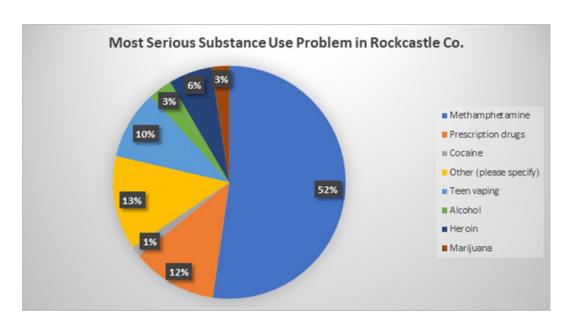




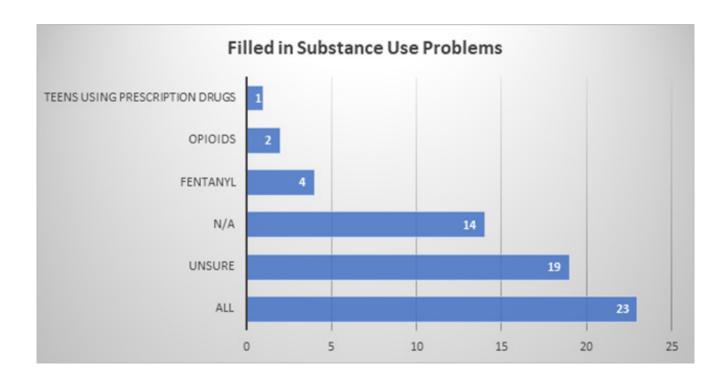


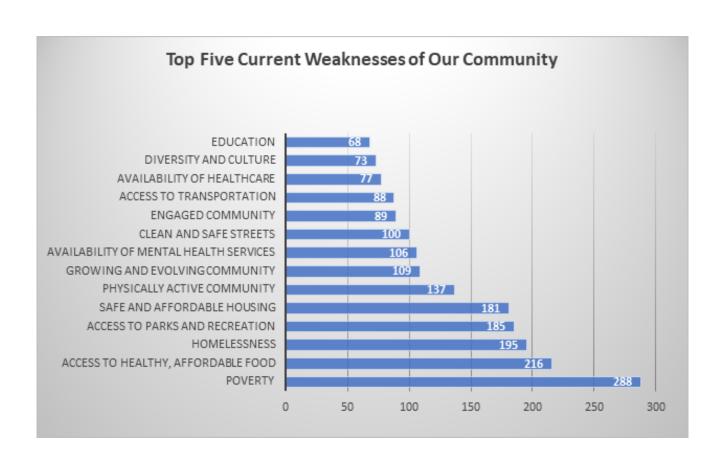




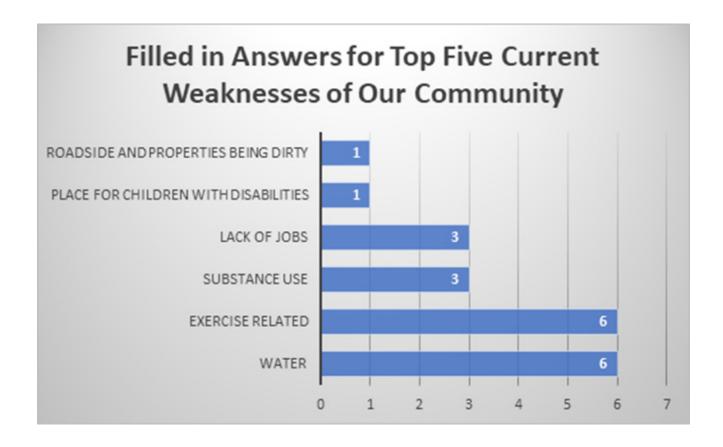


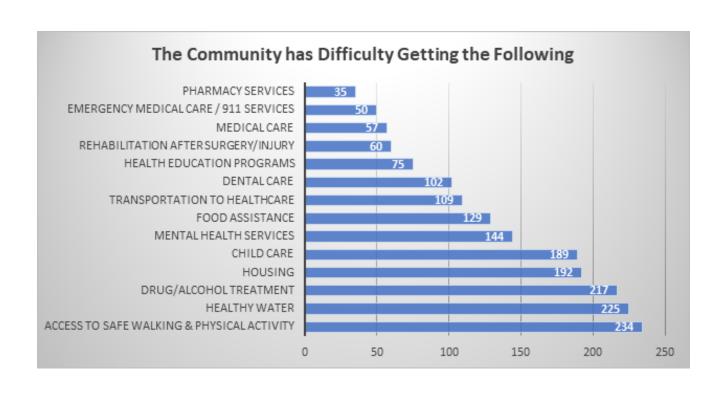














What other healthcare services are needed to locally address the health problems in Rockcastle County for the next two years?

The responses to this question ran the gamut. However, they were predominated by the need for increased number of mental health providers and the addition of substance abuse treatment services, both inpatient and outpatient for both. Other areas of suggestion were related to physical activity, such as the return of exercise classes in the Wellness Center like Silver Sneakers and reopening the Fitness Center to the community. Some suggested to build a recreational facility or community park.

There were also mentions of improving the quality and accessibility of care by adding another QuickCare clinic, more family practice providers and specialists, offering free transportation to appointments, and providing dental services to low-income patients. In terms of outreach, several suggested to host more events in areas outside of Mount Vernon and to include topics such as diabetes, nutrition, parenting, and health literacy.

Additionally, there were suggestions for things that are outside of the control of RHRCC, such as improving the quality and timeliness of EMS services in the county, or solving the taste and odor problems of the local water supply, or opening a homeless shelter.

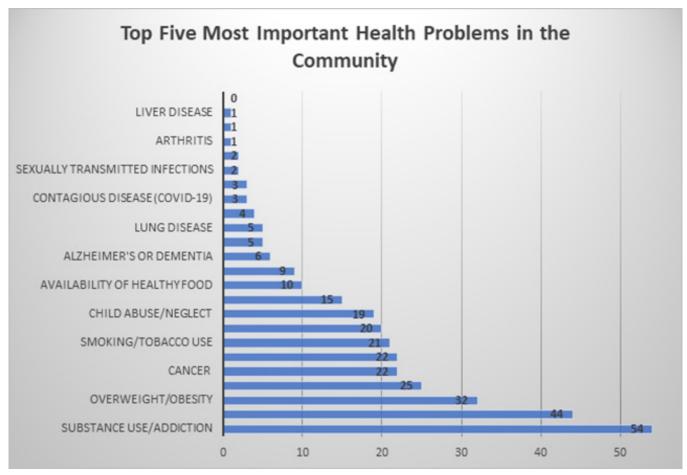


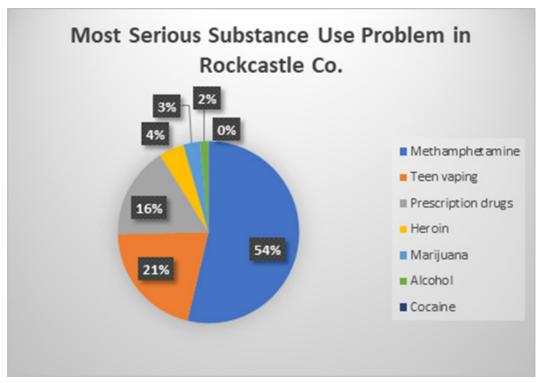
STAKEHOLDER SURVEY RESULTS



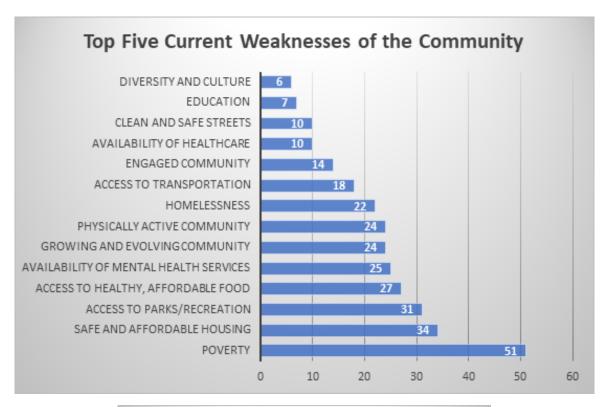


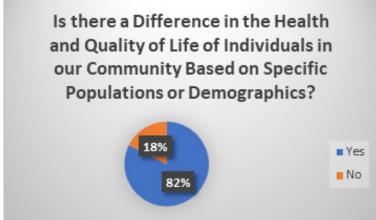








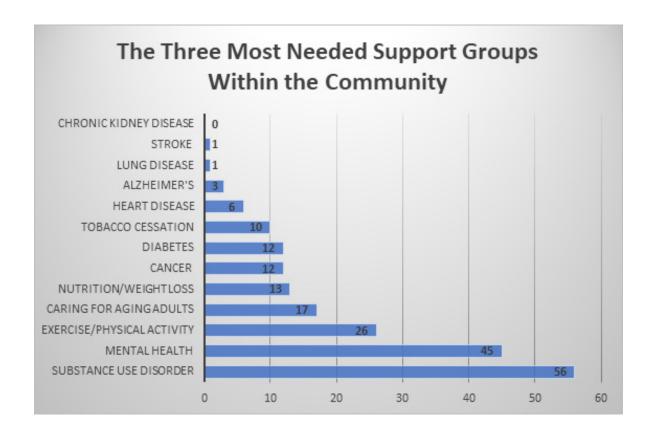


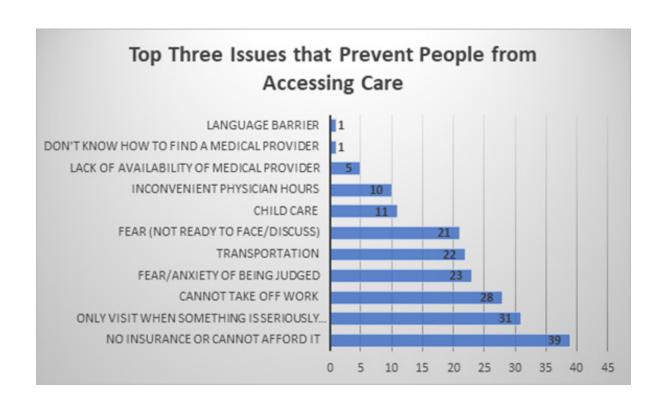


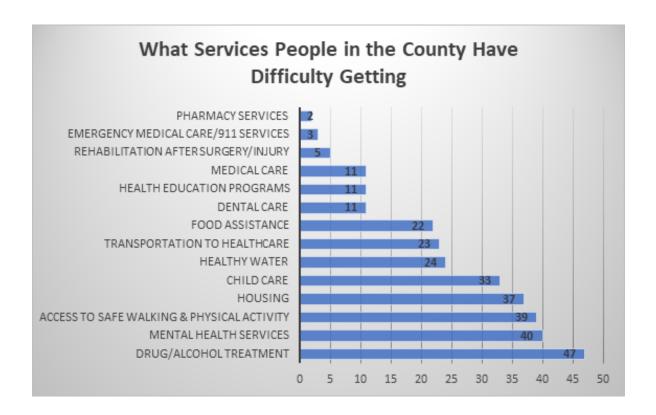


"SES" stands for Socio-Economic Status







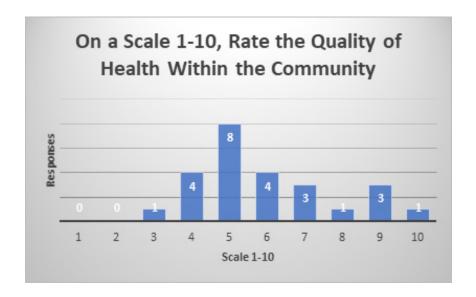


What other healthcare services are needed to locally address the health problems in Rockcastle County for the next two years?

Just as was the case for the community survey, the stakeholder survey comments were dominated by the need for substance abuse treatment and increasing the number of mental health providers, both in an inpatient and outpatient setting. Additionally, it was suggested by some to increase the number of specialties to include obstetrics/gynecology, optometry/ophthalmology, and affordable dentistry to low-income patients. There were also many who suggested a return of exercise classes to the Wellness Center, like Silver Sneakers, and reopening the Fitness Center to the community, some even suggested building a recreation facility.

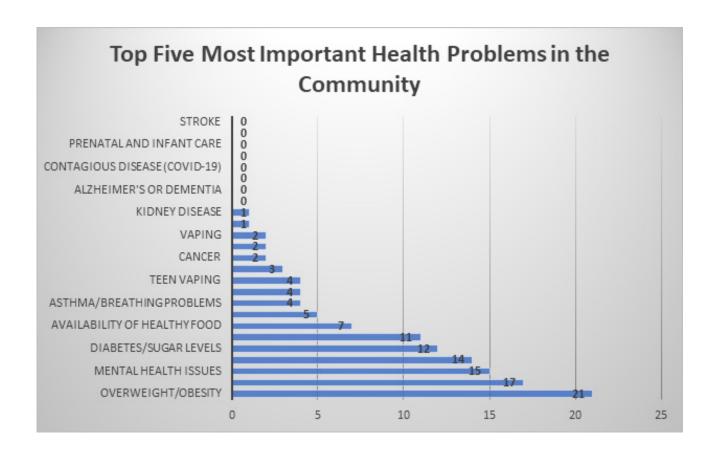


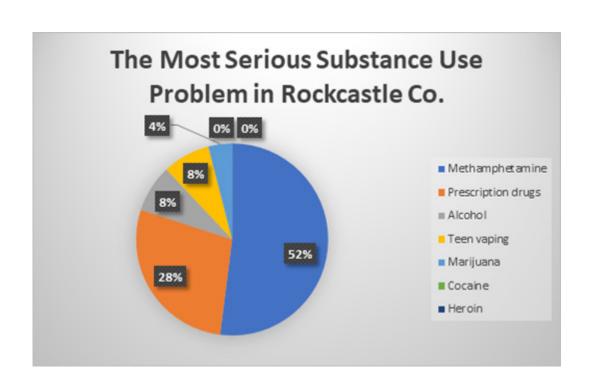
PROVIDER SURVEY RESULTS



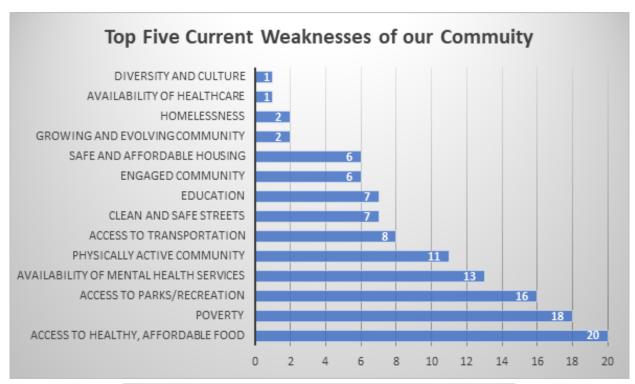


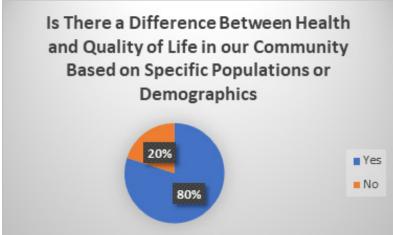


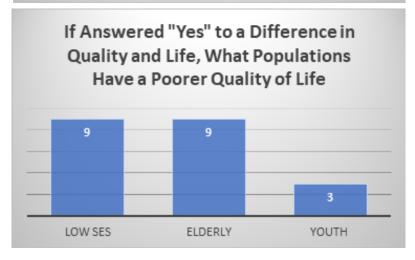






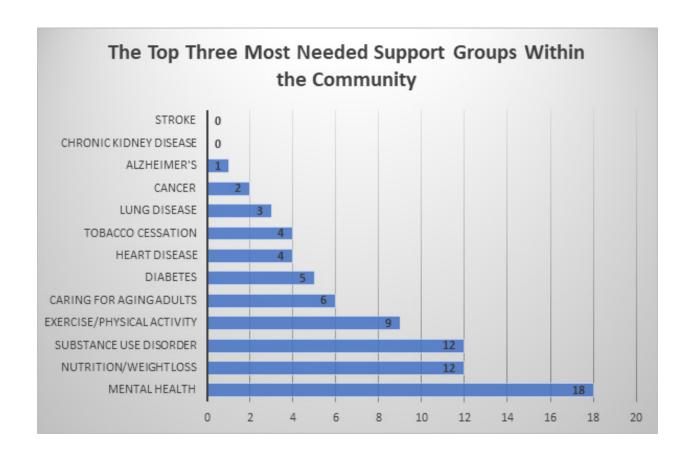


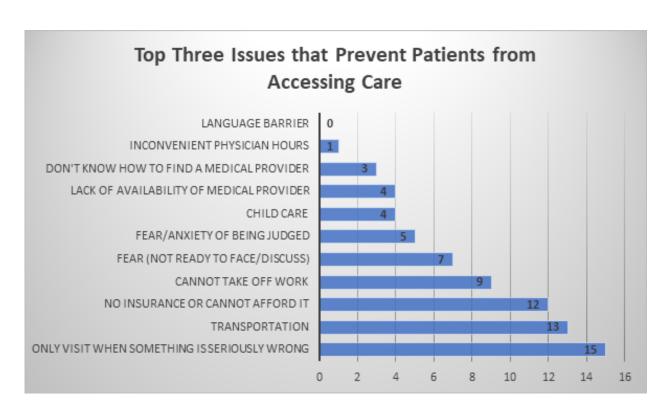




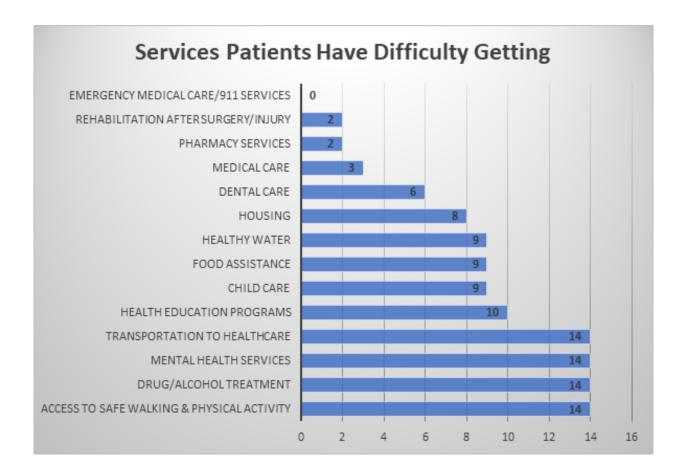
"SES" stands for Socio-Economic Status











What other healthcare services are needed to locally address the health problems in Rockcastle County for the next two years?

In addition to increasing the number of mental health providers, the providers who answered the survey suggested expanding specialties offered to include obstetrics/gynecology, dental care for low-income patients, hepatology, pulmonology, and cardiac rehabilitation. There were also some suggestions for starting supporting groups to include topics like alcoholism, mental health for both adults and children, and support for foster parents.



Priorities and Implementation Strategy

Health Priorities Identified

The objective of the secondary research and survey was to identify the most relevant community health issues. The process of prioritizing those issues took place when the steering committee reconvened. There, findings from research activities were presented and discussed. Based on those findings and any new issues identified by the committee, issues were prioritized:

PRIORITY 1: Mental Health and Substance Use

PRIORITY 2: Physical Activity and Obesity

PRIORITY 3: Caring For Aging Adults

Implementation Strategy

PRIORITY 1: MENTAL HEALTH AND SUBSTANCE USE

Mental health and substance use were the most common health disparities identified throughout the secondary research and all three survey tools. After much discussion, the steering committee voted to combine them under one overarching priority in order to ensure goal alignment between the two areas.

MENTAL HEALTH

The organization made great strides in terms of children's mental health in 2023 when it partnered with Rockcastle County Schools to launch the school-based behavioral health program, initially a grant funded program. The current grant is scheduled to expire in 2024. The organization will work to seek new grant funding in order to sustain the program. Additionally, because the school-based behavioral program is relatively new, the organization will work to promote and raise awareness of the new service.

In order to ensure continuity of care among all providers, a provider resource will also be created and disseminated for behavioral health providers.

RHRCC will work with first responder organizations to provide education on mental health, providing them tools to use in the field when encountering a patient experiencing behavioral health issues.

SUBSTANCE USE

It was identified that multiple organizations throughout the community have a stake in substance use prevention, including the Volunteers of America, UNITE, and the Cumberland Valley District Health Department. The organization will work with these entities to:

- Partner with Volunteers of America as a referral source
- Partner with the Cumberland Valley Health Department for Narcan education and training
- Partner with UNITE and the UNITE clubs within the schools for prevention education

Additionally, the organization will investigate the feasibility of hiring a Tobacco Treatment Specialist to facilitate the return of the Freedom From Smoking tobacco and vaping cessation classes, previously offered free to the community prior to the pandemic.



Priorities and Implementation Strategy

PRIORITY 2: PHYSICAL ACTIVITY AND OBESITY

The second priority identified was to address physical activity and obesity through both new and existing outreach programs for all ages.

To help fight childhood obesity, the organization will:

- Partner with local schools to promote healthy nutrition and physical activity through the Family Resource Center Enrichment Programs.
- Continue to promote the County-wide Stride Run/Walk Series new "Kids' Club," launched in January 2024.

Focusing on the general population, RHRCC will:

- Reopen the Wellness Center allowing community fitness classes to resume, post-pandemic.
- Revamp the "Healthy You 101" program, raising awareness the program is not only for diabetes and pre-diabetes, but for anyone who is interested in eating healthier and weight loss support.
- Revitalize the "Eat, Drink, and Be Healthy" program that was launched immediately prior to the pandemic.
- Conduct a mobile version of the popular "Dinner with a Doctor" series called "Walking Dinner with a Doc," hosting it at a local park or walking track.

To address the senior population, RHRCC will seek out a facilitator for the return of Silver Sneakers exercise classes to be offered in the Wellness Center.

The community relations department will also continue to seek out opportunities to partner with local organizations to provide education on healthy eating and physical activity.

PRIORITY 3: CARING FOR AGING ADULTS

Rockcastle County has an aging population. RHRCC will work to promote education and support for those caring for aging adults, by:

- Utilizing the Mobile Health Clinic to provide free medication reviews, additionally partnering with local law enforcement to offer medication disposal.
- Launching a Caregiver Support Newsletter that would include education on topics such as dementia, Alzheimer's, waiver programs, provider home visits, and Adult Day Center.
- Host a "Dinner with the Doctor" on a topic related to caring for aging adults.
- Providing the Ombudsman Resource Booklet in the clinics.

To enhance services for older adults, RHRCC will:

- Expand specialist services to include inpatient dialysis.
- Continue to address food disparity among discharged inpatients by connecting them with local food banks when food
 instability is identified.
- Work to determine the feasibility of adding geriatric nursing services.

Next Steps

RHRCC's Implementation Strategy outlines the organization's response to the three most significant health issues identified for Rockcastle County. This CHNA will be disseminated throughout the community and made available via the organization's website, www.rockcastleregional.org.

The organization invites community feedback to the report, as your input will help guide its impact, as well as the following CHNA. Please send your comments to info@rhrcc.org or call (800) 278-2195.

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