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2019

CHI Memorial Chattanooga

CHI Memorial Hixson

Community Health Needs Assessment

- Hamilton and Bradley Counties, Tennessee -

*Paper copies of this document may be obtained at: CHI Memorial Chattanooga and Hixson
2525 de Sales Ave, Chattanooga TN 37404 or 2051 Hamill Road, Hixson TN 37343 or by phone 706-647-8111
or via the hospital website <https://www.Memorial.org>*

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Perspective / Overview

Creating a culture of health in the community



Action Cycle Source: the Robert Wood Johnson Foundation's County Health Rankings website: <http://www.Countyhealthrankings.org/roadmaps/action-center>

The Action Cycle shows how to create healthy communities. The rankings later in the document assist in understanding what makes a healthy community.

The Community Health Needs Assessment (CHNA) uses systematic, comprehensive data collection and analysis to define priorities for health improvement, creates a collaborative community environment to engage stakeholders, and an open and transparent process to listen and truly understand the health needs of Hamilton and Bradley Counties, Tennessee.

2019 Community Health Needs Assessment

CHI Memorial Chattanooga and CHI Memorial Hixson as the sponsors of the assessment, engaged national leaders in community health needs assessments to assist in the project. Stratasan, a healthcare analytics and facilitation company based out of Nashville, Tennessee, provided the analysis of community health data, facilitated the focus group, conducted the interviews and facilitated a community health summit to receive community input into the priorities and brainstorm goals and actions the community could take to improve health.

- ✔ Starting on June 14th, 2019, this report is made widely available to the community via CHI Memorial Chattanooga's website <https://www.Memorial.org> and paper copies are available free of charge at CHI Memorial Chattanooga, 2525 de Sales Avenue, Chattanooga, TN 37404 or at CHI Memorial Hixson 2051 Hamill Road, Hixson, TN 37343 or by phone 423-495-2525.
- ✔ The CHI Memorial Chattanooga board of directors approved this assessment and the hospital's implementation plan on May 14th.

PROJECT GOALS

- 1 To continue a formal and comprehensive community health assessment process which allows for the identification and prioritization of significant health needs of the community to assist with resource allocation, informed decision-making and collective action that will improve health.
- 2 To continue a collaborative partnership between all stakeholders in the community by seeking input from persons who represent the broad interests of the community.
- 3 To support the existing infrastructure and utilize resources available in the community to instigate health improvement in the community.

“ We initiated the Community Health Needs Assessment with the goal to assess the health and needs of the community. This process is an affirmation of what we’ve been doing to improve health and has jumpstarted our next implementation plan,” said Andrew McGill, Senior Vice President, Strategy, Business Development & Government Relations, CHI Memorial.

“The information gathered both from public health data and from community stakeholders provided the insight the community needed to set priorities for significant health issues and will be used by the community to inform and support our implementation plans,” added Janelle Reilly, Market Chief Executive Officer, CHI Memorial Chattanooga.

Community

Input and Collaboration

Data Collection and Timeline

In January 2019, CHI Memorial Chattanooga and Hixson began a Community Health Needs Assessment for Hamilton and Bradley Counties. CHI Memorial Chattanooga and Hixson sought input from persons who represent the broad interests of the community using several methods:

- Information gathering, using secondary public health sources, occurred in January 2019.
- A random landline, cell phone and online survey of community members was conducted January 7 through January 26, 2019 .
- 23 community members, not-for-profit organizations representing medically underserved, low-income, minority populations, and the elderly (Housing Authority, Glass House Collective, American Red Cross, Chattanooga Area Food Bank), Cempa Community Care, health providers (hospitals, health department, medical society, Susan G. Komen), education providers (Bradley County schools, Cleveland City schools, University of Tennessee- Chattanooga), and the Governor’s Foundation for Health and Wellness participated in a focus group and individual interviews for their perspectives on community health needs and issues on February 8, 2019.
- A Community Health Summit was conducted on February 21, 2019 with 47 community stakeholders. The audience consisted of healthcare providers, business leaders, government representatives, schools, not-for-profit organizations, employers and other community members.



Information Gaps

While this assessment was quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might in some ways limit the ability to assess all the community's health needs.

For example, certain population groups (such as the homeless, institutionalized persons, or those who only speak a language other than English or Spanish) were not represented in the primary data. Other population groups (for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups) might not be identifiable or might not be represented in numbers sufficient for independent analyses.

Participants

Seventy-three individuals from forty-one community and healthcare organizations collaborated to implement a comprehensive CHNA process focused on identifying and defining significant health needs, issues, and concerns of Hamilton and Bradley Counties. The three-month process centered on gathering and analyzing data as well as receiving input from persons who represented the broad interests of the community to provide direction for the community and hospital to create a plan to improve the health of the community.

Participation by those Representing the Broad Interests of the Community

Participation in the focus group, interviews and at the Community Health Summit creating the Hamilton and Bradley Counties Community Health Needs Assessment and Improvement Plan included:

Organization	Population Represented (kids, low income, minorities, those w/o access)	How Involved
American Red Cross	Southeast TN	Focus Group
Bethel AME		Summit
Bradley Co Health Department		Summit
Bradley County Schools	Bradley County	Focus Group
Bradley County Schools	Bradley County	Focus Group
Cadas	Chemically dependent and their families	Summit
Cempa Community Care	Community	Focus Group
Chattanooga Area Food Bank	Southeast TN, Northwest GA, 20 Counties, kids, adults, seniors, families, veterans	Focus Group, Summit
Chattanooga Housing Authority	Low income, kids, elderly, minorities	Focus Group
CHI Memorial		Summit
Cleveland City Schools	Bradley County	Focus Group
Community Member		Summit
Glass House Collective	Low-income, minorities	Focus Group
Glenwood Neighborhood Association		Summit
Global Partnership for Telehealth		Summit
Greater Chattanooga Colon Cancer Foundation		Focus Group
Hamilton County Coalition	Prevention, treatment for addiction	Focus Group
Hamilton County Health Department	Hamilton County	Focus Group, Summit
Hamilton County Schools	Hamilton County	Focus Group
Homeless Health Care Center/ Health Dept.		Summit
Hospice of Chattanooga		Summit
Kidney Foundation		Summit
LifeSpring Community Health	Kids, low income, provides access	Interview
McKee Foods		Summit
Medical Society/Foundation		Interview, Summit
Memorial Foundation		Summit
New Hope Baptist Church	Church, African American Community	Summit
Siskin Rehab Hospital	Disabilities	Focus Group
Southeast Tennessee Health Consortium Foundation		Summit
Southeast TN Area Agency on Aging & Disability	10 Counties	Focus Group, Summit
Southern Adventist University School of Nursing		Summit
Susan G. Komen	Community, Cancer patients	Focus Group, Summit
Thankful Baptist Church		Summit
The Governor's Foundation for Health and Wellness	All	Interview
The Samaritan Center		Summit
University of TN Chattanooga- Public Health	Community	Focus Group
University of TN Chattanooga, School of Nursing	Community	Focus Group, Summit
UT and TSU extension		Summit
UT Extension		Summit
Vanderbilt University Faculty/ FJC volunteer		Summit
Volunteers in Medicine		Summit

In many cases, several representatives from each organization participated; the City of Chattanooga Mayor's Office was also engaged in the Summit.

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

Input of medically underserved, low-income and minority populations was received during the focus groups, interviews, and the Community Health Summit. Agencies representing these population groups were intentionally invited to the focus group, interviews and Summit. Additionally the community telephone and online surveys were representative of the whole community – by age, income, and education.

Input of those with Expertise in Public Health

Representatives of the Hamilton County Health Department participated in the interviews as well as attending the Summit.

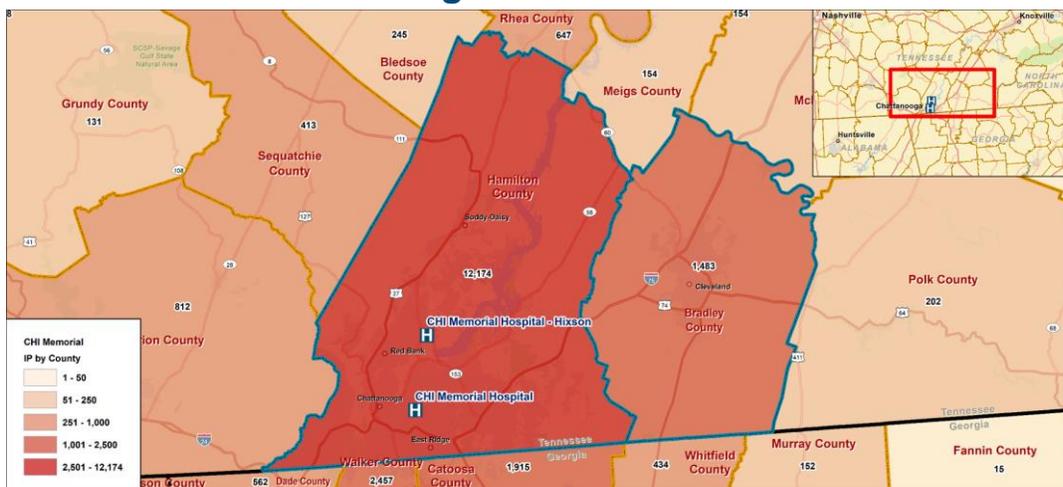
Community Engagement and Transparency

Many members of the community participated in the focus group, individual interviews, community surveys, and the Summit. We are pleased to share the results of the Community Health Needs Assessment with the rest of the community in hopes of attracting more advocates and volunteers to improve the health of Hamilton and Bradley Counties. The following pages highlight key findings of the assessment. We hope you will take the time to review the health needs of our community as the findings impact each and every citizen in one way or another; and join in the improvement efforts. The comprehensive data analysis may be obtained via a PowerPoint on the website or by contacting CHI Memorial Chattanooga.

Community Selected for Assessment

Hamilton and Bradley Counties were the primary focus of the CHNA due to the service area of CHI Memorial Chattanooga and CHI Memorial Hixson. Used as the study area, Hamilton and Bradley Counties provided 60% of inpatient discharges for the two hospitals. 54.6% of Memorial inpatients came from the two counties in 2018 and 86% of Hixson's patients came from the two counties. The community includes medically underserved, low-income and minority populations who live in the geographic areas from which CHI Memorial Chattanooga and Hixson draws their patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under CHI Memorial Chattanooga's Financial Assistance Policy.

CHI Memorial Chattanooga and Hixson Patients - 2018



Source: CHI Memorial Chattanooga, 2018

Key Findings

Community Health Assessment

Results

Based on the primary and secondary data collected, the following needs were prioritized by attendees at the Community Health Summit. The remainder of the document outlines the process and data.

- 1(tie). Poverty/jobs
- 1(tie). Access to care and insurance
- 2(tie). Obesity – healthy eating, active living
- 2(tie). Personal responsibility/education
5. Child health
6. Mental health
7. Chronic diseases
8. Substance abuse

Process and Methods

Both primary and secondary data sources were used in the CHNA.

Primary methods included:

- Community focus group
- Individual interviews with community members
- Survey of community members via landline, cell phone and online surveys
- Community Health Summit

Secondary methods included:

- Public health data – death statistics, County Health Rankings
- Demographics – population, poverty, uninsured
- Psychographics – Behavior measured by spending and media preferences



Photo credit Outdoor Chattanooga.com

Demographics of the Community 2018-2023

Description of the Communities Served

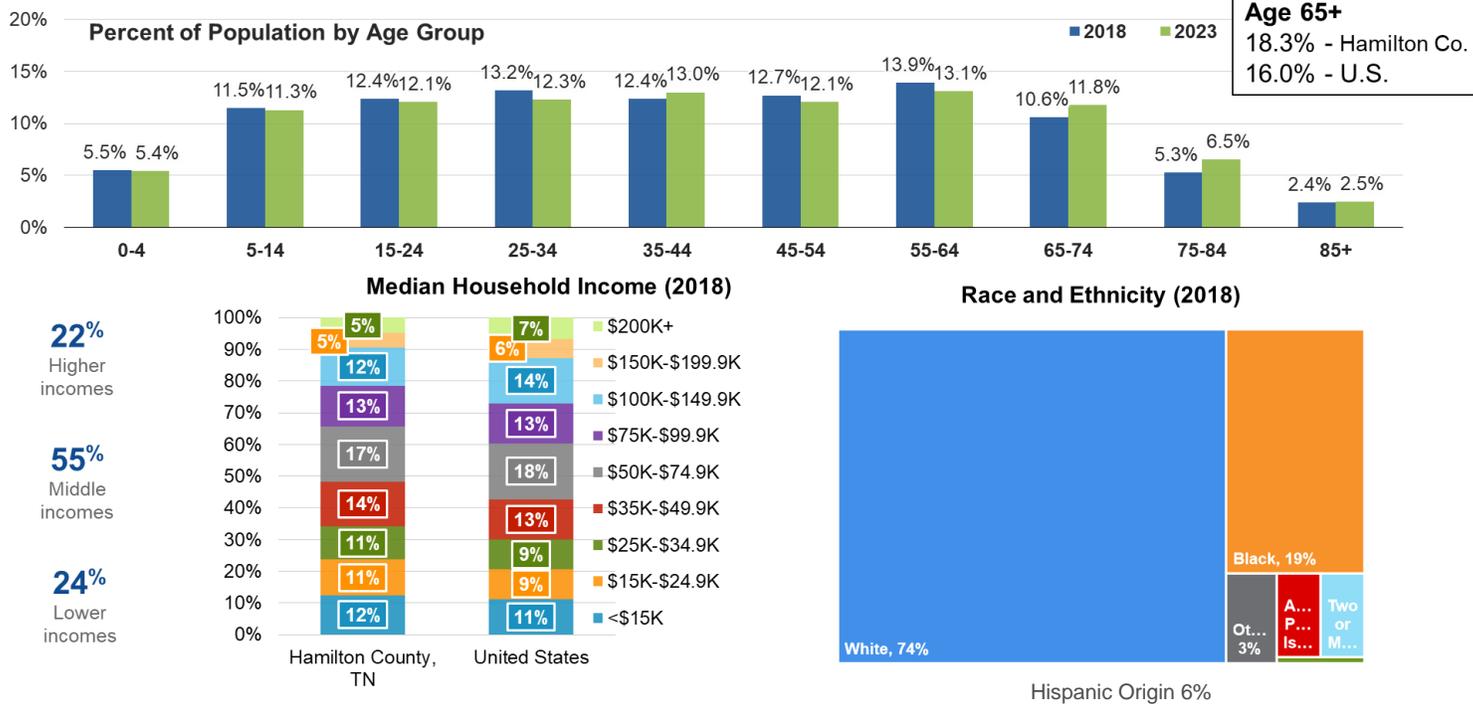
The table below shows the demographic summary of Hamilton and Bradley Counties compared to Tennessee and the U.S.

	Hamilton County	Bradley County	Tennessee	USA
Population	367,367	107,051	6,818,402	330,088,686
Median Age	40.8	40.1	39.4	38.3
Median Household Income	\$51,711	\$44,812	\$49,776	\$58,100
Annual Pop. Growth (2018-2023)	1.03%	0.90%	0.89%	0.83%
Household Population	148,058	40,795	2,671,026	124,110,001
Dominant Tapestry	Salt of the Earth (6B)	Salt of the Earth (6B)	Rooted Rural (10B)	Green Acres (6A)
Businesses	14,654	3,167	227,771	11,539,737
Employees	226,285	47,684	3,172,301	151,173,763
Medical Care Index*	90	79	89	100
Average Medical Expenditures	\$1,762	\$1,540	\$1,733	\$1,950
Total Medical Expenditures	\$260.8 M	\$62.8 M	\$4.6 B	\$242.0 B
Racial and Ethnic Make-up				
White	74%	88%	76%	70%
Black	19%	5%	17%	13%
American Indian	0%	0%	0%	1%
Asian/Pacific Islander	2%	1%	2%	6%
Other	3%	3%	3%	7%
Mixed Race	2%	2%	2%	3%
Hispanic Origin	6%	7%	6%	18%

Source: ESRI

The median is the value at the midpoint of a frequency. There is an equal probability of falling above or below the median.

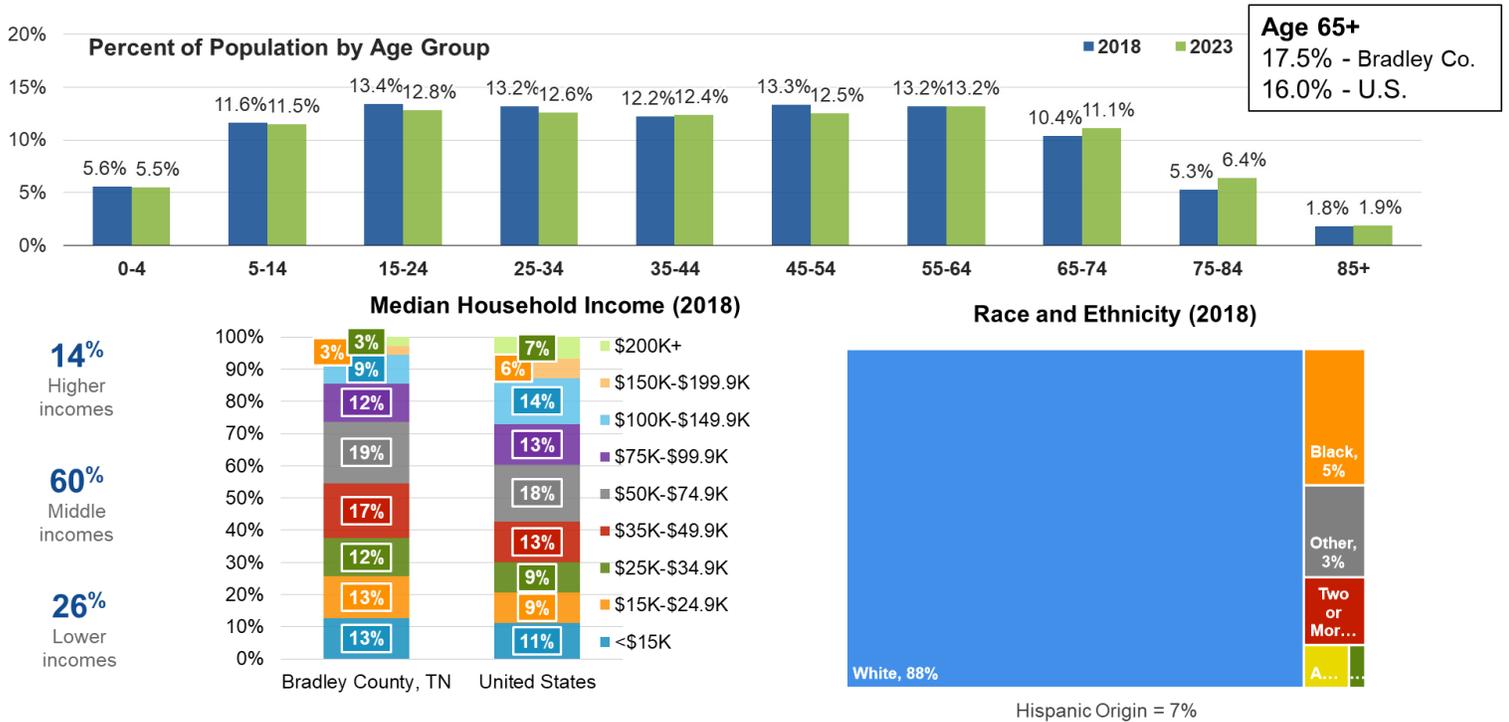
Hamilton County



Source: ESRI

- The population of Hamilton County is projected to increase from 2018 to 2023 (1.03% per year). Tennessee is projected to increase .89% per year. The U.S. is projected to increase .83% per year.
- Hamilton County had a higher median age (40.8 median age) than TN 39.4 and the U.S. 38.3. Hamilton County percentage of the population 65 and over was 18.3%, higher than the US population 65 and over at 16%.
- Hamilton County had higher median household income at \$51,711 than TN (\$49,776) but lower than the U.S. (\$58,100). The rate of poverty in Hamilton County was 13.5% which was lower than TN (15.8%) and the U.S. (14.0%). A higher percentage of blacks as a percent of total population were in poverty than the white population.
- The household income distribution of Hamilton County was 22% higher income (over \$100,000), 55% middle income and 24% lower income (under \$24,999).
- The medical care index measures how much the populations spent out-of-pocket on medical care services. The U.S. index was 100. Hamilton County was 90, indicating 10% less spent out of pocket than the average U.S. household on medical care (doctor's office visits, prescriptions, hospital visits).
- The racial and ethnic make-up of Hamilton County was 74% white, 19% black, 2% mixed race, 2% Asian/Pacific Islander, 3% other, and 6% Hispanic Origin. (These percentages total to over 100% because Hispanic is an ethnicity, not a race.)

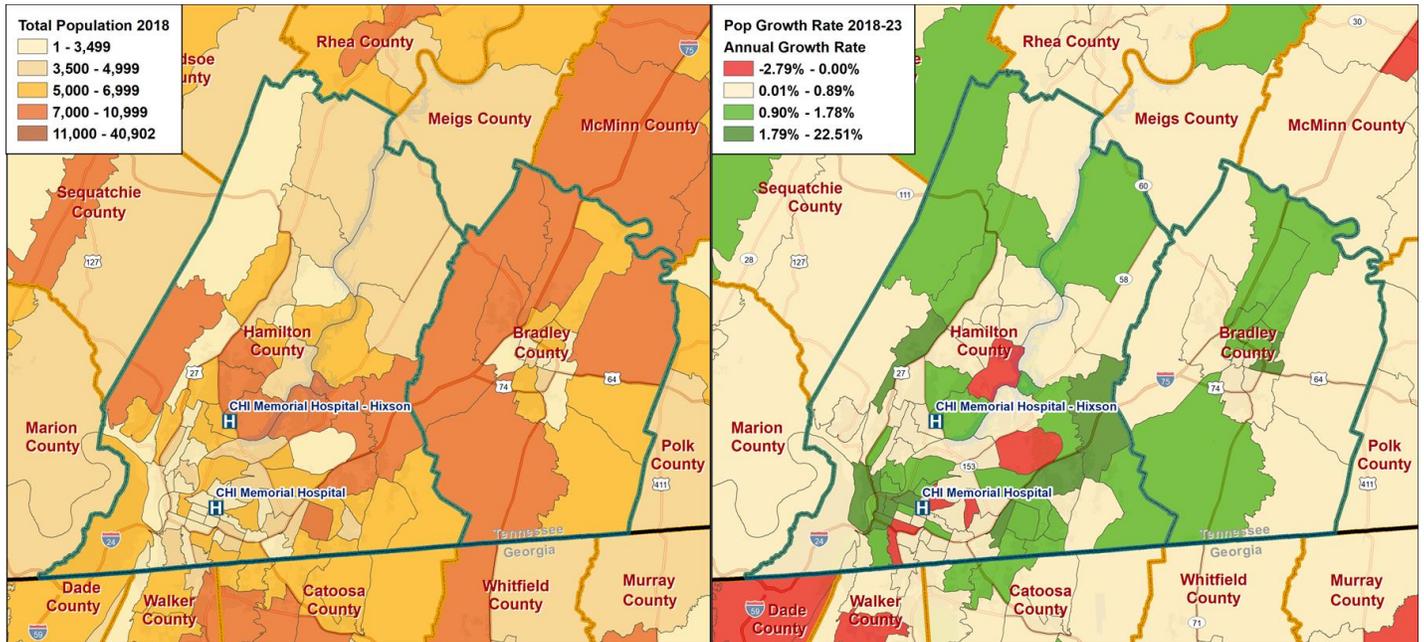
Bradley County



Source: ESRI

- The population of Bradley County is projected to increase from 2018 to 2023 (.90% per year). Tennessee is projected to increase .89% per year, and the U.S. .83% per year.
- Bradley County had a higher median age (40.1 median age) than TN, 39.4 and the U.S. 38.3. Bradley County percentage of the population 65 and over was 17.5%, higher than the US population 65 and over at 16%.
- Bradley County had lower median household income at \$44,812 than TN (\$49,776) and the U.S. (\$58,100). The rate of poverty in Bradley County was 14.2% which was lower than TN (15.8%) but higher than the U.S. (14.0%). A higher percentage of Hispanic as a percent of total population were in poverty than the white population.
- The household income distribution of Bradley County was 14% higher income (over \$100,000), 60% middle income and 26% lower income (under \$24,999).
- The medical care index measures how much the populations spent out-of-pocket on medical care services. The U.S. index was 100. Bradley County was 79, indicating 21% less spent out of pocket than the average U.S. household on medical care (doctor's office visits, prescriptions, hospital visits).
- The racial and ethnic make-up of Bradley County was 88% white, 5% black, 2% mixed race, 2% Asian/Pacific Islander, 3% other, and 7% Hispanic Origin. *(These percentages total to over 100% because Hispanic is an ethnicity, not a race.)*

2018 Population by Census Tract and Change (2018-2023)



Source: ESRI

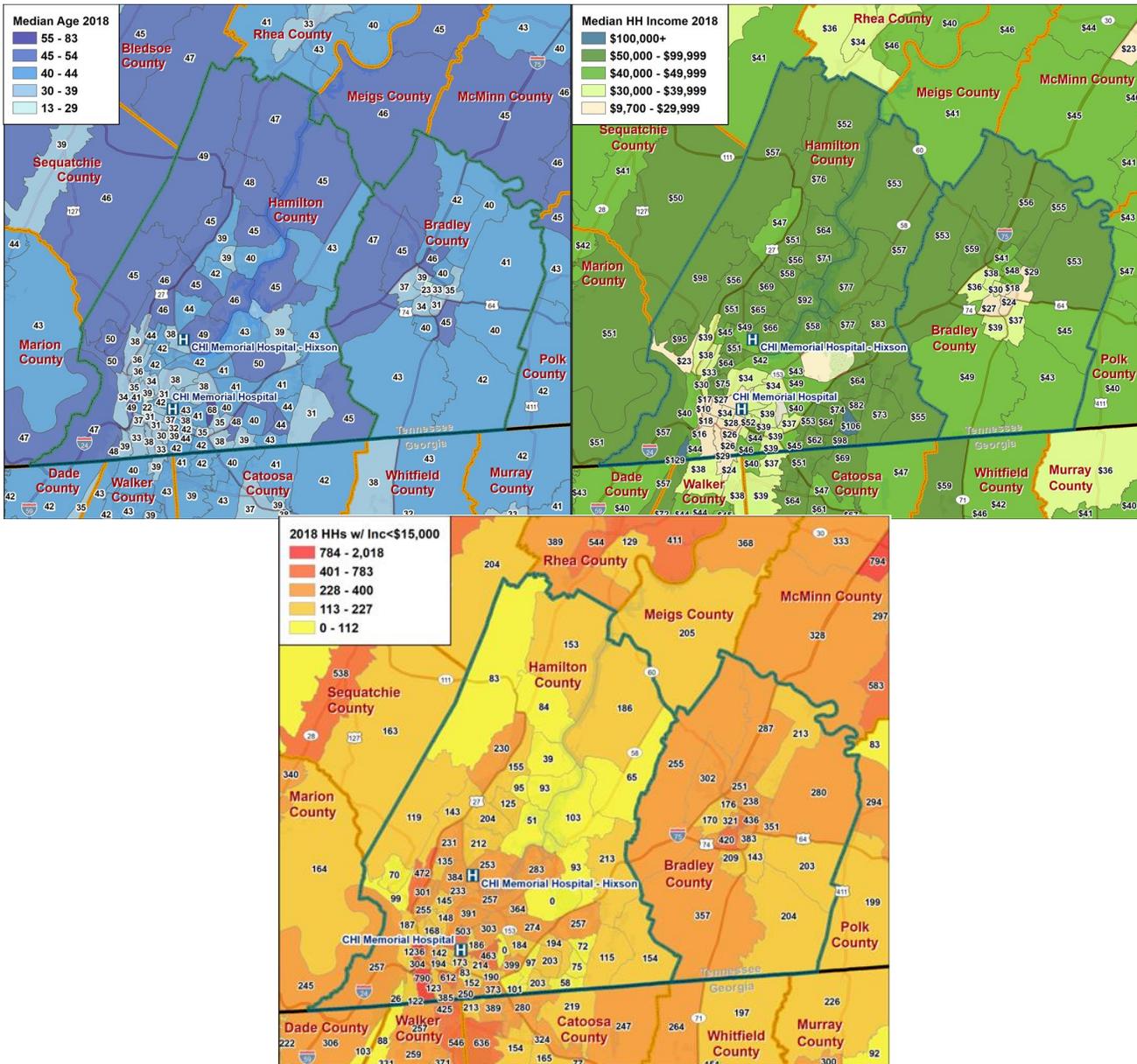
Red is population decline
 Yellow is positive up to the TN growth rate
 Green is greater than the TN growth rate
 Dark Green is twice the TN growth rate

Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people.

Hamilton County population was projected to increase from 2018 to 2023, 1.03% per year. However, there are a few census tracts where the population was projected to decline, one northeast of CHI Memorial Hospital – Hixson, one to the east of both hospitals and four tracts around CHI Memorial Hospital – Chattanooga. There are several census tracts projected to increase twice rate of Tennessee, one east of Hixson on the far eastern border of the county, and several around downtown, particularly around the river.

Bradley County population was projected to increase .9% per year. All census tracts in Bradley County were projected to increase.

2018 Median Age & Income



These maps depict median age and median income by census tract. Looking at age and income by census tract is helpful to demonstrate all areas of a county are not the same. The health needs may be very different in the northwest corner of the county with a median age of 49 and the census tracts downtown with median age of 31.

Looking at median household income by census tract also gives insight into health status. The lower income areas may require more assistance than the higher income tracts. The health needs of the Lookout Mountain tract with median household income of \$129,000 will be different than the neighborhoods south of Main St. like Alton Park where the median household income is \$18,000 per year.

The lower map is the number of households making less than \$15,000 per year. Again further attempting to identify those areas within the county that may have lower health status.

Additionally, Hamilton County's September 2018 preliminary unemployment was 3.1% and Bradley's was 3.4% compared to 3.6% for Tennessee and 3.7% for the U.S., which is a large decline in unemployment since 2014. These figures do not include those who have ceased looking for work and dropped out of the workforce. However, indications are these people have begun to reenter the workforce.

Business Profile

Fifty-six percent of employees in Hamilton County were employed in:

- Health care and social assistance (15.5%)
- Retail trade (13.2%)
- Manufacturing (10.6%)
- Accommodations & food service (9.2%)
- Finance & Insurance (7.5%)

Retail, accommodation & food service jobs offers health insurance at a lower rate than healthcare, manufacturing and finance and insurance. Hamilton County gains 40,421 net commuters per day commuting to the county for work, with 13,607 commuting out of the county and 54,028 commuting into the county.

Sixty-eight percent of employees in Bradley County were employed in:

- Manufacturing (22.4%)
- Health care and social assistance (14.5%)
- Retail trade (13.0%)
- Educational services (8.2%)
- Public administration (6.3%)

Retail jobs offers health insurance at a lower rate than healthcare, manufacturing, education and public administration. Bradley County loses 1,194 net commuters per day commuting outside the county for work, with 10,517 commuting out of the county and 9,323 commuting into the county.

It is beneficial to contact people in groups to improve health. There are three primary places people gather during the week, work, church and school. These are three excellent places to reach people to create a culture of health.

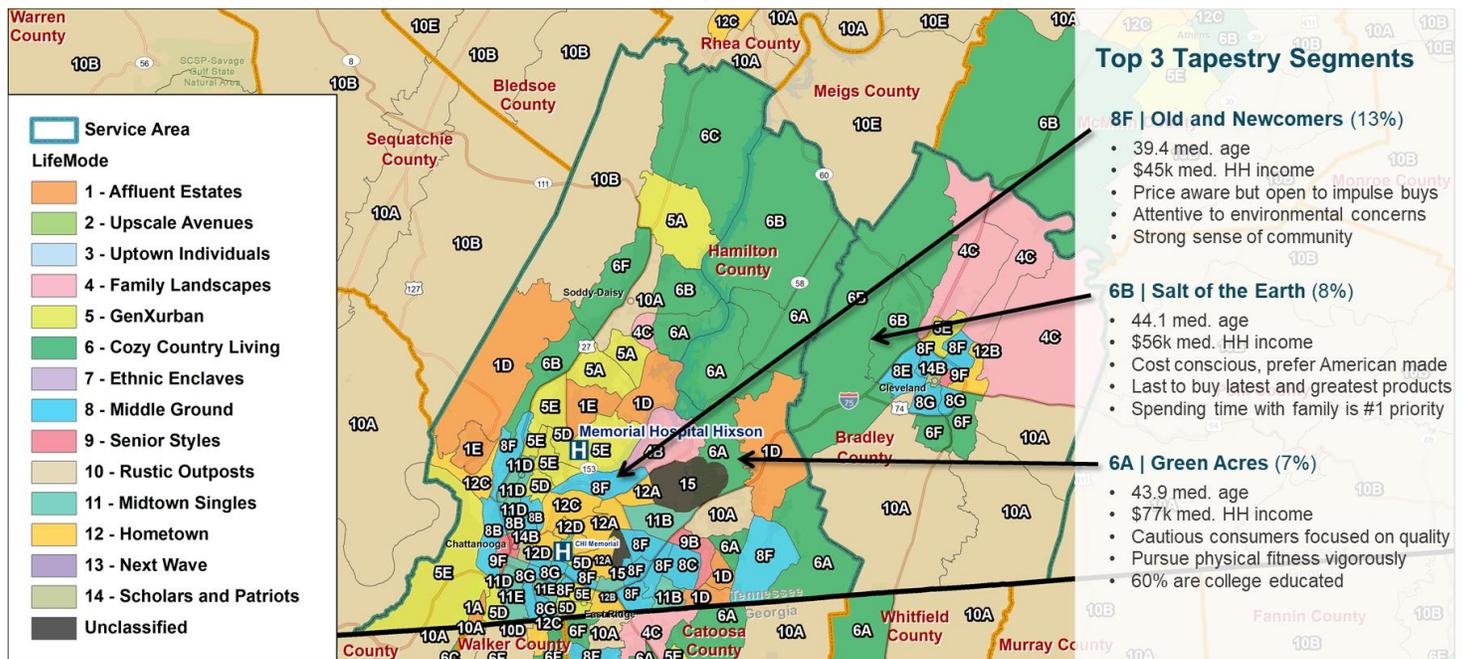
Source: ESRI

Tapestry Segmentation

Demographics are population, age, sex, race. Psychographics are adding behavior data in the form of spending habits and survey data on top of demographics. 28% of Hamilton and Bradley Counties are included in three Tapestry Segments. These are very diverse markets with seven different LifeModes represented. The map below is color coded by LifeMode, which are groupings of Tapestry Segments that behave similarly.

The dominant Tapestry Segments in the counties were Old and Newcomers (13%), Salt of the Earth (8%), and Green Acres (7%). The map below demonstrates the dominant Tapestry Segment by census tract.

There is a very brief description of the segments on the right of the map and on the next two pages. There is much more information on Tapestry Segments, at <http://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm>. Studying the Tapestry Segments in the study area help determine health habits and communication preferences of residents enabling more effective communication and implementation of solutions to improve health. Many spoke of meeting people where they are in the focus group and interviews. Studying their Tapestry Segment can help do that.



Source: ESRI



LifeMode Group: Middle Ground

Old and Newcomers

8F

Households: 2,859,200

Average Household Size: 2.12

Median Age: 39.4

Median Household Income: \$44,900

WHO ARE WE?

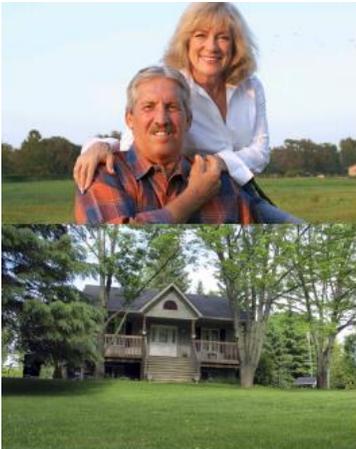
This market features singles' lifestyles, on a budget. The focus is more on convenience than consumerism, economy over acquisition. *Old and Newcomers* is composed of neighborhoods in transition, populated by renters who are just beginning their careers or retiring. Some are still in college; some are taking adult education classes. They support charity causes and are environmentally conscious. Age is not always obvious from their choices.

OUR NEIGHBORHOOD

- Metropolitan city dwellers.
- Predominantly single households (Index 148), with a mix of married couples (no children); average household size lower at 2.12.
- 55% renter occupied; average rent, \$880, (Index 85).
- 45% of housing units are single-family dwellings; 45% are multiunit buildings in older neighborhoods, built before 1980.
- Average vacancy rate at 11%.

SOCIOECONOMIC TRAITS

- Unemployment is lower at 5.1% (Index 93), with an average labor force participation rate of 62.6%, despite the increasing number of retired workers.
- 32% of households are currently receiving Social Security.
- 31% have a college degree (Index 99), 33% have some college education, 9% are still enrolled in college (Index 121).
- Consumers are price aware and coupon clippers, but open to impulse buys.
- They are attentive to environmental concerns.
- They are more comfortable with the latest technology than buying a car.



LifeMode Group: Cozy Country Living

Salt of the Earth

6B

Households: 3,545,800

Average Household Size: 2.59

Median Age: 44.1

Median Household Income: \$56,300

WHO ARE WE?

Salt of the Earth residents are entrenched in their traditional, rural lifestyles. Citizens here are older, and many have grown children that have moved away. They still cherish family time and also tending to their vegetable gardens and preparing homemade meals. Residents embrace the outdoors; they spend most of their free time preparing for their next fishing, boating, or camping trip. The majority has at least a high school diploma or some college education; many have expanded their skill set during their years of employment in the manufacturing and related industries. They may be experts with DIY projects, but the latest technology is not their forte. They use it when absolutely necessary, but seek face-to-face contact in their routine activities.

OUR NEIGHBORHOOD

- This large segment is concentrated in the Midwest, particularly in Ohio, Pennsylvania, and Indiana.
- Due to their rural setting, households own two vehicles to cover their long commutes, often across county boundaries.
- Home ownership rates are very high (Index 133). Single-family homes are affordable, valued at 25 percent less than the national market.
- Nearly two in three households are composed of married couples; less than half have children at home.

SOCIOECONOMIC TRAITS

- Steady employment in construction, manufacturing, and related service industries.
- Completed education: 40% with a high school diploma only.
- Household income just over the national median, while net worth is nearly double the national median.
- Spending time with family their top priority.
- Cost-conscious consumers, loyal to brands they like, with a focus on buying American.
- Last to buy the latest and greatest products.
- Try to eat healthy, tracking the nutrition and ingredients in the food they purchase.



LifeMode Group: Cozy Country Living
Green Acres

6A

Households: 3,923,400

Average Household Size: 2.70

Median Age: 43.9

Median Household Income: \$76,800

WHO ARE WE?

The *Green Acres* lifestyle features country living and self-reliance. They are avid do-it-yourselfers, maintaining and remodeling their homes, with all the necessary power tools to accomplish the jobs. Gardening, especially growing vegetables, is also a priority, again with the right tools, tillers, tractors, and riding mowers. Outdoor living also features a variety of sports: hunting and fishing, motorcycling, hiking and camping, and even golf. Self-described conservatives, residents of *Green Acres* remain pessimistic about the near future yet are heavily invested in it.

OUR NEIGHBORHOOD

- Rural enclaves in metropolitan areas, primarily (not exclusively) older homes with acreage; new housing growth in the past 15 years.
- Single-family, owner-occupied housing, with a median value of \$235,500.
- An older market, primarily married couples, most with no children.

SOCIOECONOMIC TRAITS

- Education: More than 60% are college educated.
- Unemployment is low at 3.8% (Index 70); labor force participation rate is high at 66.8% (Index 107).
- Income is derived not only from wages and salaries but also from self-employment (more than 13% of households), investments (27% of households), and increasingly, from retirement.
- They are cautious consumers with a focus on quality and durability.
- Comfortable with technology, more as a tool than a trend: banking or paying bills online is convenient; but the Internet is not viewed as entertainment.
- Economic outlook is professed as pessimistic, but consumers are comfortable with debt, primarily as home and auto loans, and investments.

Focus Group and Interview Results

Twenty-three community stakeholders representing the broad interests of the community participated in a focus group and individual interviews on February 8, 2019 for their input into the community's health. Community participation in the focus group and interviews represented a broad range of interests and backgrounds. Below is a summary of the 90-minute focus group discussion and individual interviews.

1. How do you define health?

- World Health Organization definition: state of complete mental, physical and social well-being
- All encompassing
- Safety, quality of life
- Very individual – each person could define health differently

2. Generally, how would you describe the community's health?

- 4 out of 10, not good
- Diverse
- Disparities – determined by wealth, home ownership, socioeconomics, racial and ethnic differences. Those with the lowest income have the poorest health status. The U.S. spends more per capita on health and is 31st in health status worldwide.

3. What are the most important health issues facing Hamilton and Bradley Counties?

- Opioids
- Hepatitis A & C
- Mental Health
- Lack of access to transportation
- Lack of healthy food
- Affordability of healthcare
- Low income
- Obesity
- High blood pressure
- Healthy food, nutrition
- Physical Inactivity
- Asthma
- Diabetes
- Tobacco use
- Chronic diseases
- Affordable medication
- Affordable insurance
- Socioeconomic issues
- Access to doctors

4. What are the most important health issues facing various populations including medically-underserved, low-income and minority populations?

- Healthcare costs, affordable healthcare, lack of insurance, high cost of insurance
- Allergies and Eczema for immigrant kids
- East Chattanooga has a larger Hispanic population
- Health disparities in the African American population
- Lack of trust of the medical industry

Focus Group Results, cont.

5. What are the most important health issues facing children/teens?

- Good education – access to good schools
- Good parenting
- Diabetes and hypertension
- School students don't have access to care
- YRBSS survey indicates depression in children
- Birth to Five Program (federal) prepping children for school
- Infant mortality
- Need prenatal health
- Teenage pregnancy
- Food impacts health – pregnancy, growing children and impairs cognition
- Need to improve breastfeeding rates
- Safety – parents don't let kids outside due to violence or perceived violence
- Kids vaping

6. What are the most important health issues facing seniors?

- Access to appropriate healthcare
- Lack of care
- Dementia
- Grandparents raising grandchildren - lack of parenting
- Cost of medicine and treatment
- Transportation
- Quality, affordable assisted living facilities
- In the gap between needing a nursing home or assisted living
- Few services for in-home care and services

7. What behaviors have the most negative impact on health?

- Lack of care for others, lack of sensitivity for differences stands in the way, not being respectful and understanding of others place in life.
- Cell phones, electronics – people now work 24/7 and don't have down time and take drugs to sleep and to wake up. All the screen time also contributes to inactivity and lack of social skills.
- Inactivity – 30% of coronary heart disease is due to inactivity alone, same for obesity. Alton Park, Piney Wood 52% inactive, Lookout Mountain, St. Elmo, 20% inactive.
- Healthy eating – real food, not processed
- Sedentary lifestyles, screen time, kids don't go outside and play
- Unhealthy diet – access and cost
- We tend to stay in silos and not work together

8. What environmental factors have the biggest impact on community health?

- Greenways and green spaces
- Accessible parks and playgrounds
- Chattanooga and the county doing a lot to rebuild and decrease blight, however gentrification follows, decreasing affordability in neighborhoods. The gentrification is driving people away from the beauty being built for the sake of the population. Affordable housing is crucial.
- No sidewalks, lack of infrastructure for walking and bicycles
- Lead pollution on southside, mitigation for ground pollution, southside below Main St.
- History of pollution
- Safety, violence or fear of violence

Focus Group Results, cont.

9. What are the barriers to improving health going forward?

- Construction displacing people in the city
- Communities have little access to healthy foods
- Lack of communication between doctors
- Funds are insufficient with the expanding needs. As NPFs specialize harder to find funding.
- Inner City schools – poor get poorer
- Safety – older single women who don't want to go outside
- Don't work together well
- Lack of collaboration
- Being unable to reach the groups that need help with the correct help

10. In 2016, the priority health issues were: Obesity, substance abuse (alcohol, tobacco, drugs), access to care and insurance, physical activity/lifestyle, education and health awareness, mental health, crime, violence/social issues, chronic diseases, aging.

What has changed most in the health status in the last 3 years?

- Substance abuse has gotten worse with the opioid epidemic
- Cancer is a little bit better
- Smoking is declining, but vaping is increasing – issue with kids
- Kids in Bradley County have little to no health education
- Made some progress on obesity
- Opioid prescriptions are decreasing but now more fentanyl.
- Not adequate treatment available for substance abuse

11. What community assets support health and wellbeing?

- Playgrounds, parks
- Coordinated school health program
- The large medical community
- Non-profit organizations
- Community Kitchen – prepares hot meals
- Metropolitan Ministries – provide resources
- Resource rich
- Meals on Wheels – Area Agency on Aging
- YMCA – largest food distribution in community
- Volunteers in Medicine Clinic
- Community Foundations – Lyndhurst, McClellan
- TVA's green and healthy home initiative (GHHI) works on improving homes
- Food Bank
- Churches
- CHEAL Clinic – Erlanger, (Children's Healthy Eating Active Living Clinic)
- Project Access – gets people in touch with specialists
- Clinica Medicos – Family practice that sees uninsured patients and they do as much as they can in their facility
- Glasshouse Collective doing great things
- Dispensary of Hope
- Cempa Community Care & Chattanooga CARES Foundation
- Lifebridge – physician wellbeing program First Things First – strengthens families

Focus Group Results, cont.

11. What does the community need in order to manage health conditions or stay healthy?

- Education on health issues and resources available
- Resource guide
- More adequate housing
- Food essentials
- Transitional houses
- Addiction resources
- More primary care
- More specialized care

12. What does the community need in order to improve their health?

- Mental healthcare coordinating with physical healthcare
- Safe places to walk
- Affordable housing
- Affordable healthcare - adults and seniors
- Expanding Medicaid
- Drug abuse support programs
- Healthcare rates not increasing with the inclusion of indigent care
- Diabetes care
- Access to healthcare – knowledge of what's available
- More doctors and specialists
- More physical activities for youth
- Passionate leaders – get organizations to work together

13. If you had the power you so richly deserve, what priority health improvement action should Hamilton and Bradley Counties focus on?

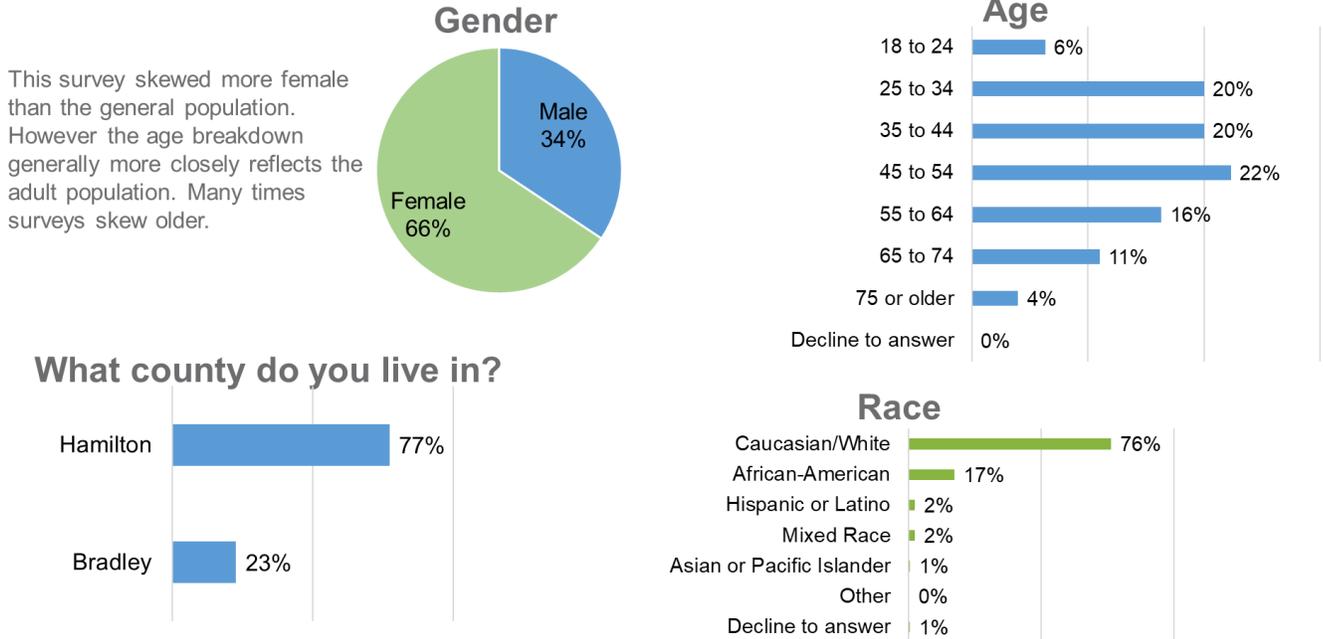
- More homecare for seniors
- Open clinics in neighborhoods and mobile clinics
- Getting everyone aware of the issues at hand
- Support for parents/guardians who need it
- Collaboration of people / organizations
- New LifeSpring community health clinic
- Health initiatives will fail if they are backed by people
- Nutrition education
- After school activities would decrease teenage pregnancies
- Access to care still an issue – expand Volunteers in Care
- Get Congress to act on Big Pharma
- The Health Department can distribute resource guides they created
- Encourage people and organizations to work together, not compete
- More access to care
- Decrease the price of medications

Survey Process

Wilkins Research Services conducted the community surveys by landline, cell phones and online for Hamilton and Bradley County residents. 300 surveys were completed: 109 landlines, 40 cell phones, and 151 online.

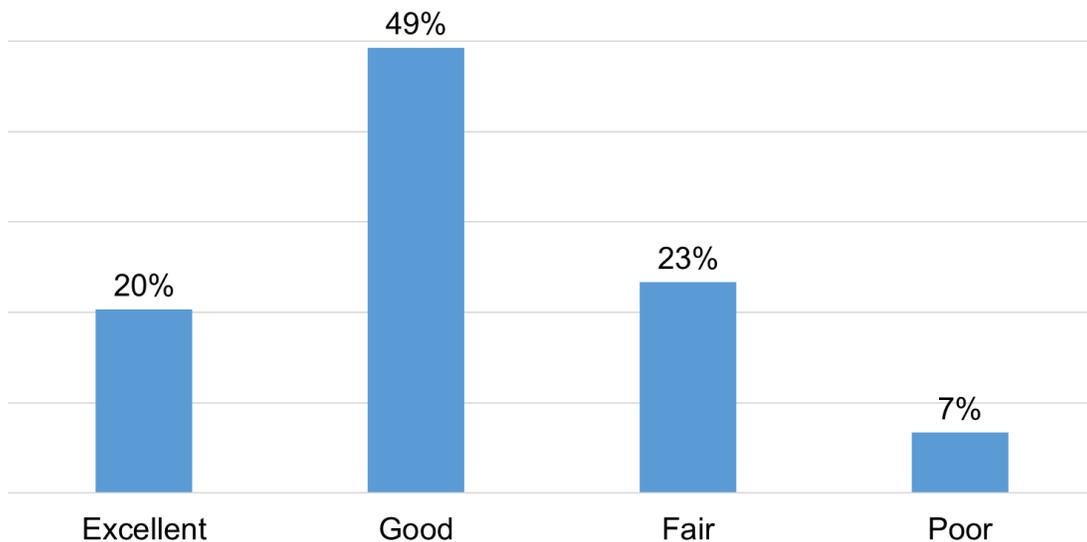
Survey Demographics

How would you describe the overall health status of the citizens of Hamilton and Bradley Counties?



Health Status

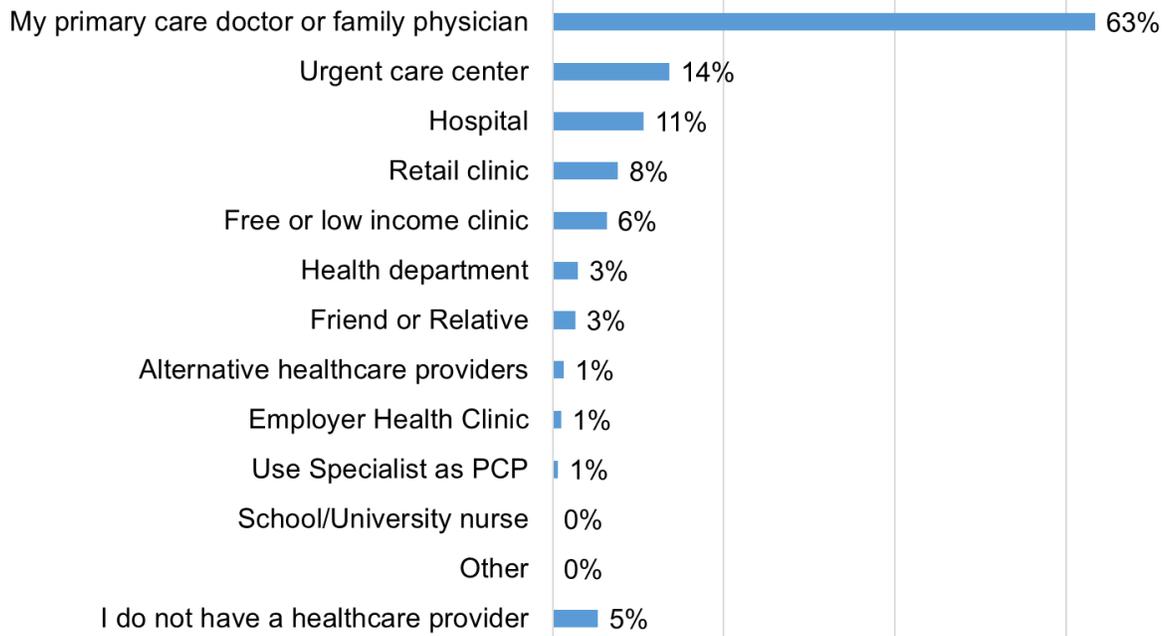
Generally, how would you describe your health?



30% believe their health is fair or poor, leaving 70% believing their health is excellent or good.

Non-Urgent Healthcare Needs

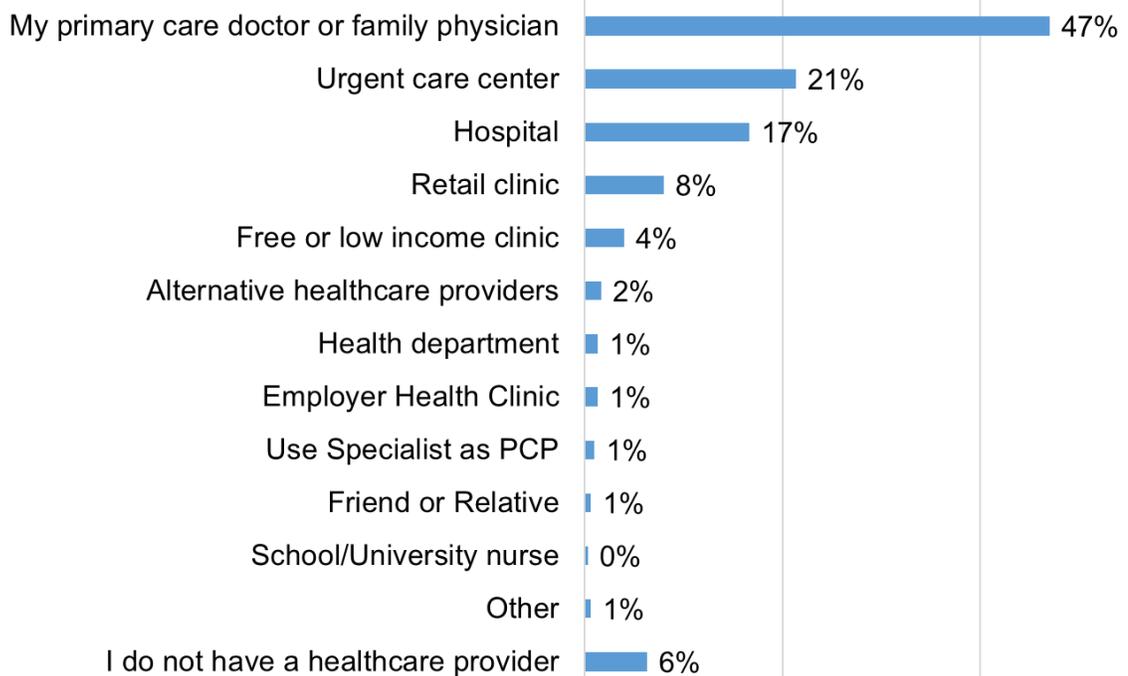
If you have one person or group you turn to for healthcare needs, where do you go most often when you have a non-emergency non-urgent healthcare need?



Most people go to their primary care doctor or family physician for non-urgent healthcare needs, followed by urgent care centers then a hospital.

Urgent Healthcare Needs

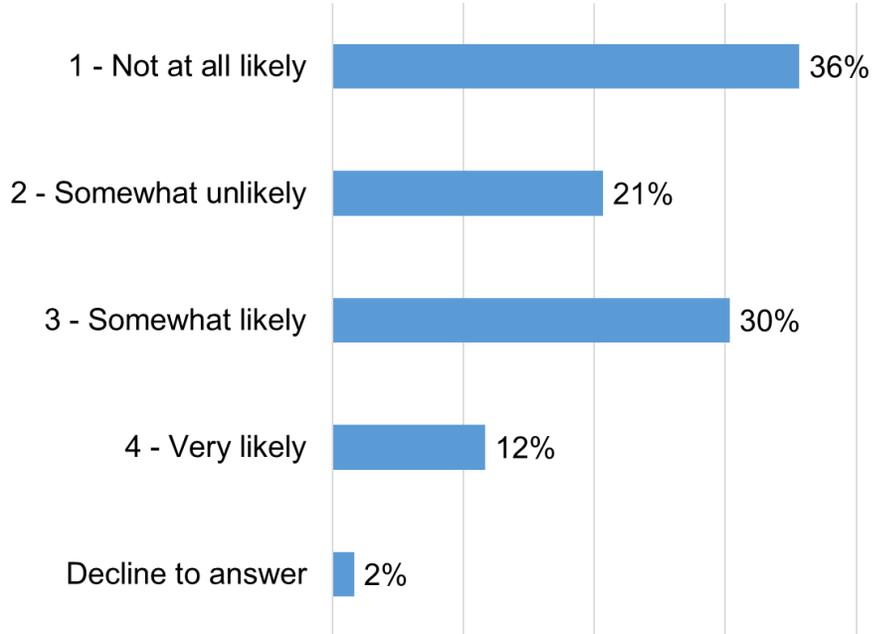
If you have one person or group you turn to for healthcare needs, where do you go most often when you have a non-emergency but urgent health care need?



Most people go to their primary care doctor or family physician for urgent healthcare needs, followed by urgent care centers then a hospital.

Virtual Physician Care

How likely are you to utilize virtual physician care such as through the computer or your smart phone?

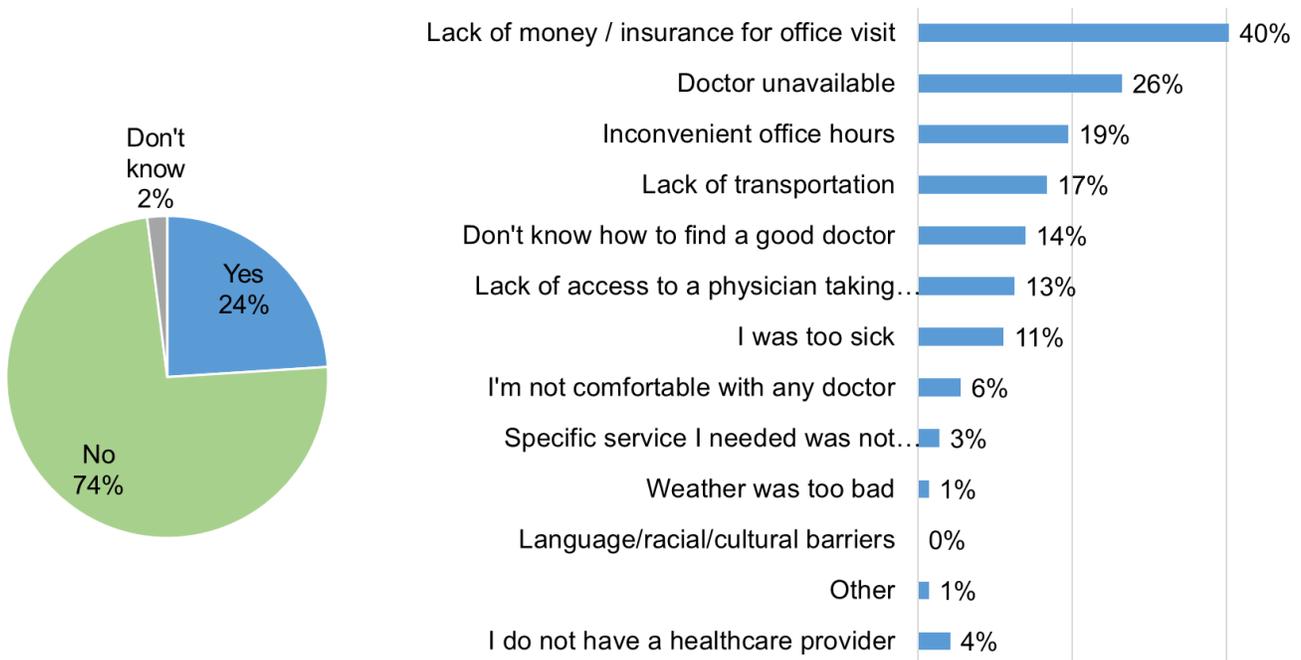


57% were somewhat unlikely or not at all likely to utilize virtual physician care.

Physician Access

Was there a time in the past 12 months when you needed to see a doctor but could not?

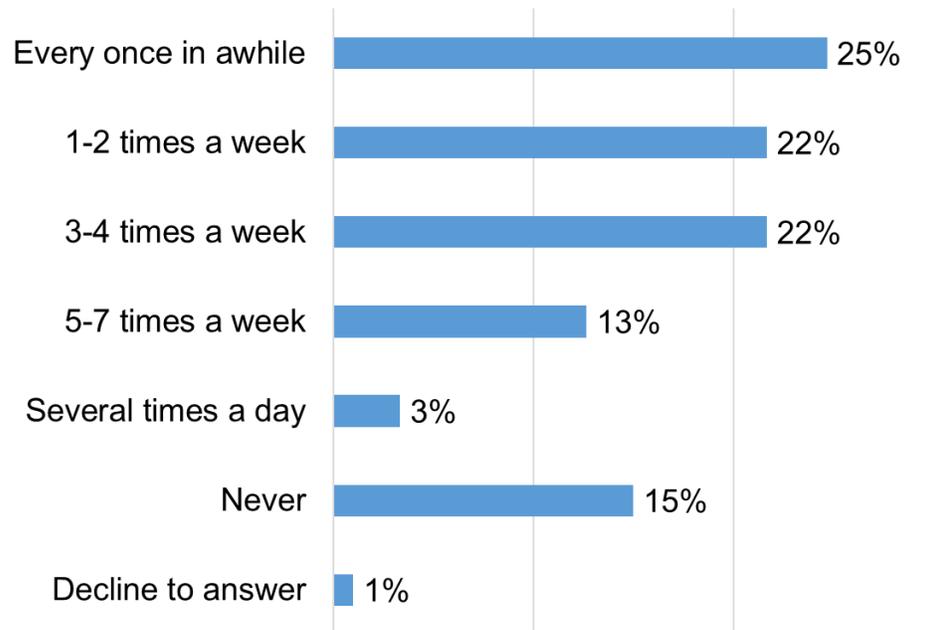
What are some reasons you could not see a doctor?



24% indicated there was a time in the last 12 months when they needed to see a doctor but could not. This is a higher percentage compared to other surveys. The primary reasons were lack of money or insurance for an office visit, or a doctor was unavailable.

Exercise

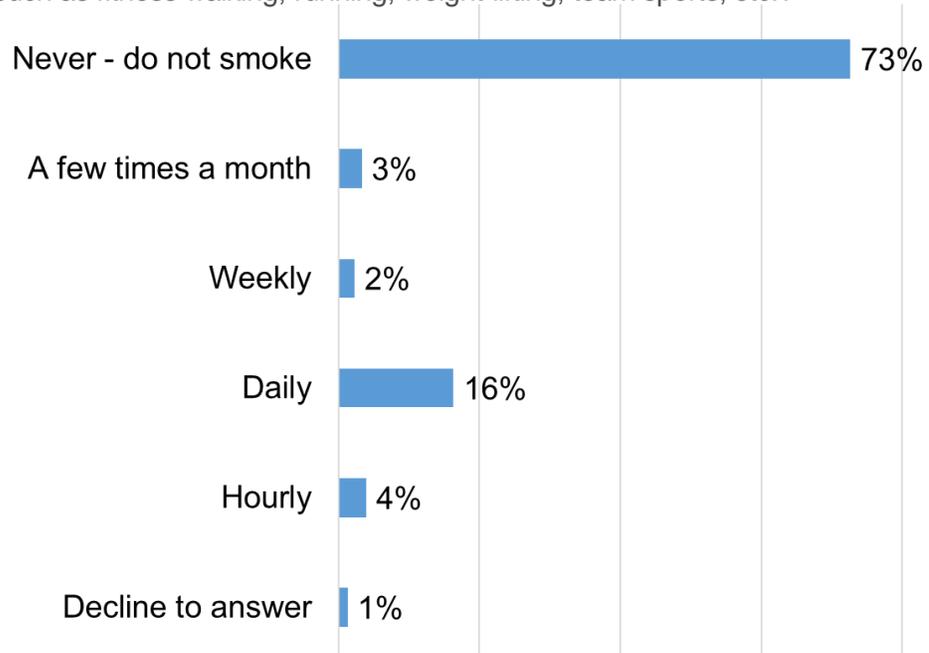
During the past month, other than your regular job, about how often did you participate in any physical activities or exercise, such as fitness walking, running, weight-lifting, team sports, etc.?



57% exercise regularly, while 40% do not exercise regularly.

Smoking

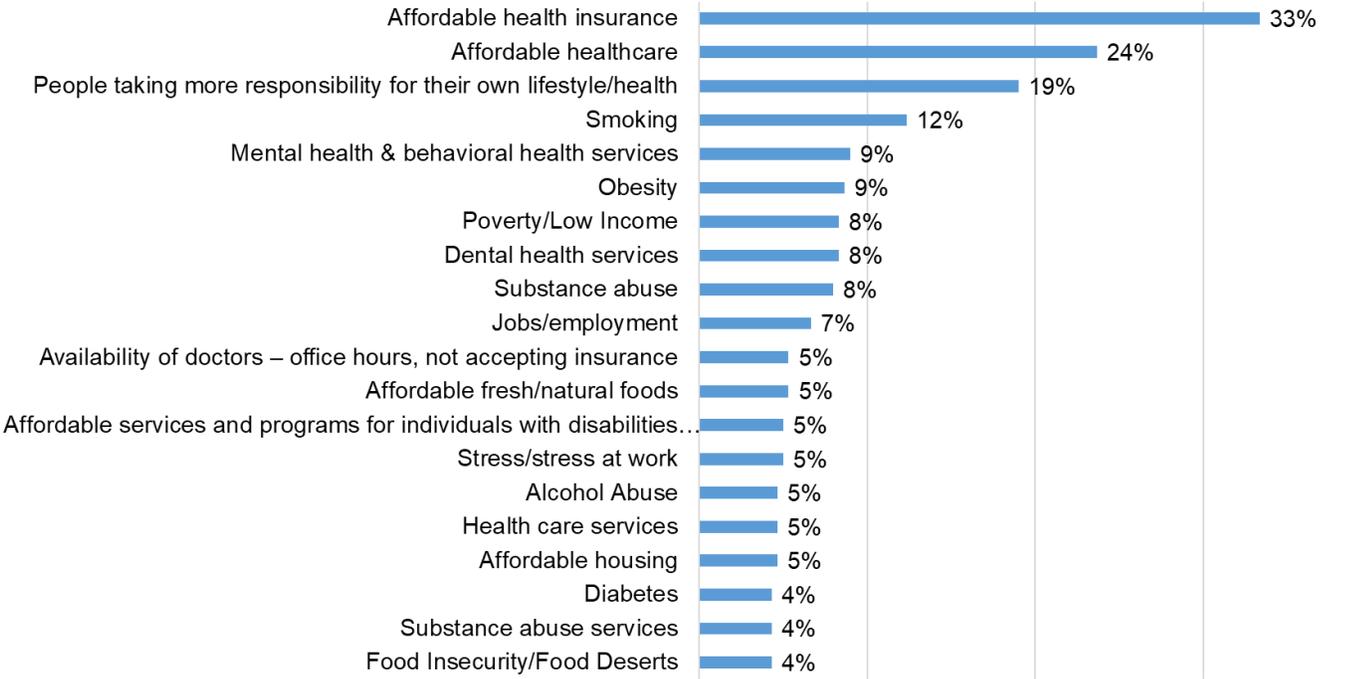
During the past month, other than your regular job, about how often did you participate in any physical activities or exercise, such as fitness walking, running, weight-lifting, team sports, etc.?



22% smoke regularly while 73% do not smoke.

Top Three Issues that Impact Health

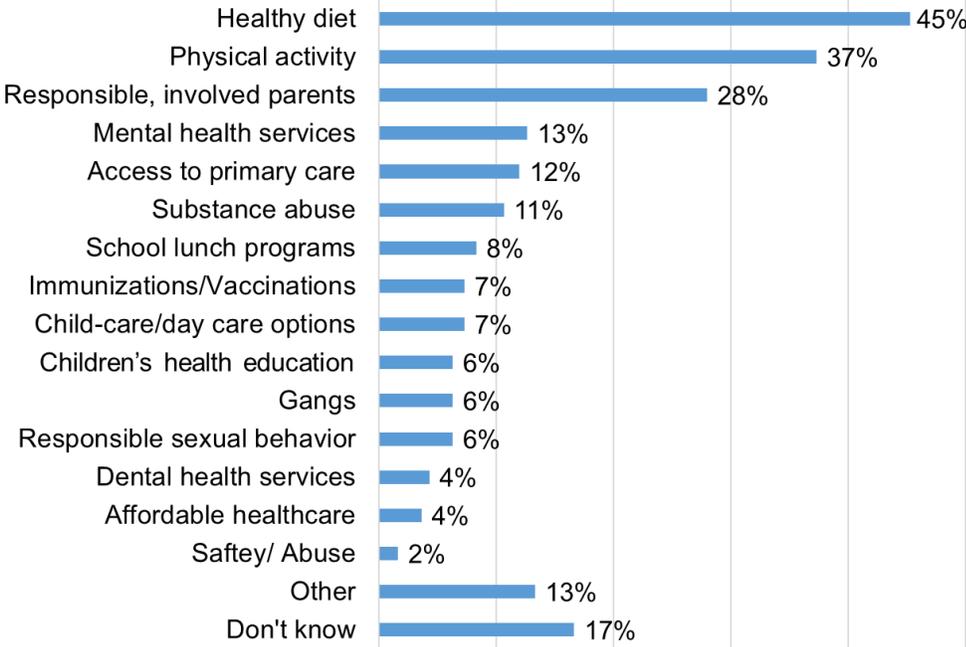
What are the top 3 issues in your community that impact people's health?



Affordable health insurance and healthcare followed by personal responsibility for health and lifestyle are the top three issues that impact people's health.

Top Three Concerns for Children

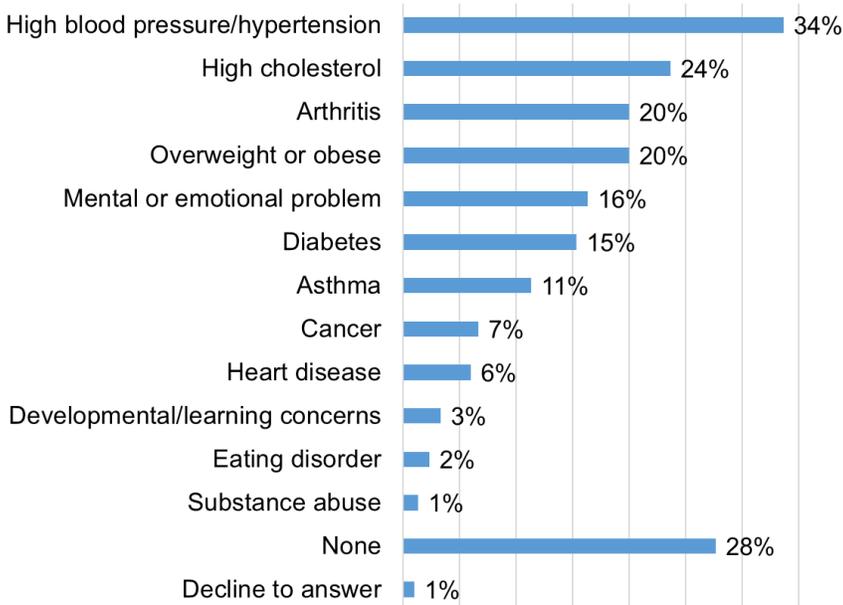
In your opinion, what are the top 3 health concerns for children in your community?



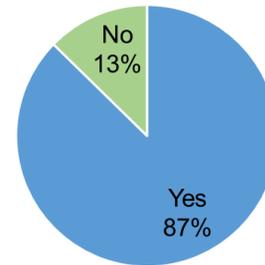
Healthy diet, physical activity and responsible, involved parents are the top three concerns for children.

Health Conditions

Have you ever been told by a doctor you have any of these conditions, diseases or challenges?



Did you receive treatment for your health condition(s)?

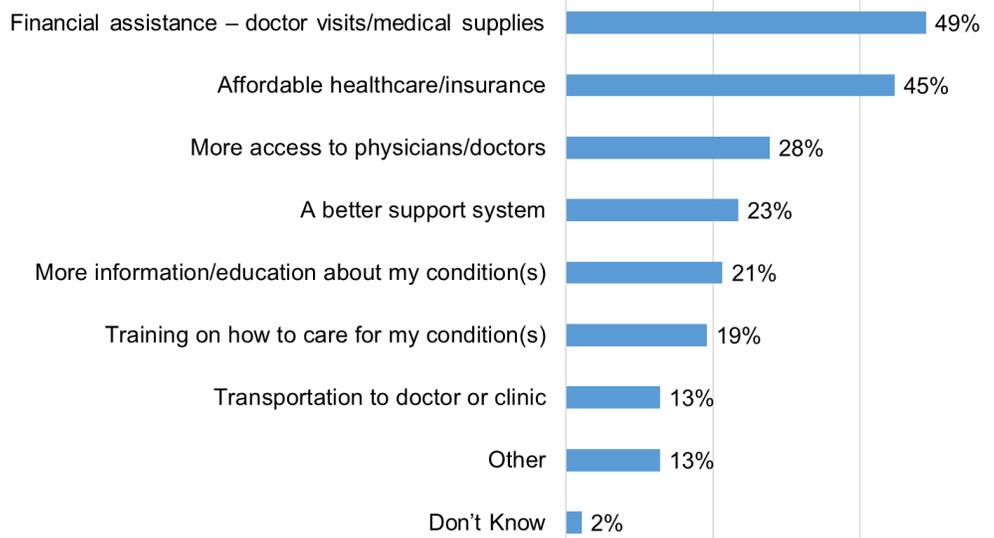
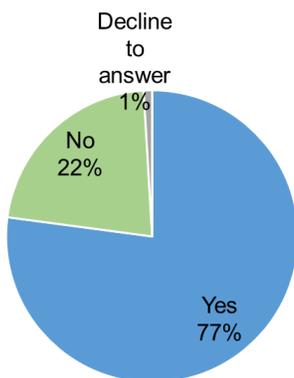


28% of those surveyed have no conditions, diseases or challenges. Of those that have a condition, 34% have high blood pressure, 24% have high cholesterol, 20% have arthritis or are overweight or obese. 13% did not receive treatment for their conditions.

Needed to Manage Health

Do you feel you have all that you need to manage your health condition(s)? What do you need in order to manage your health condition(s)?

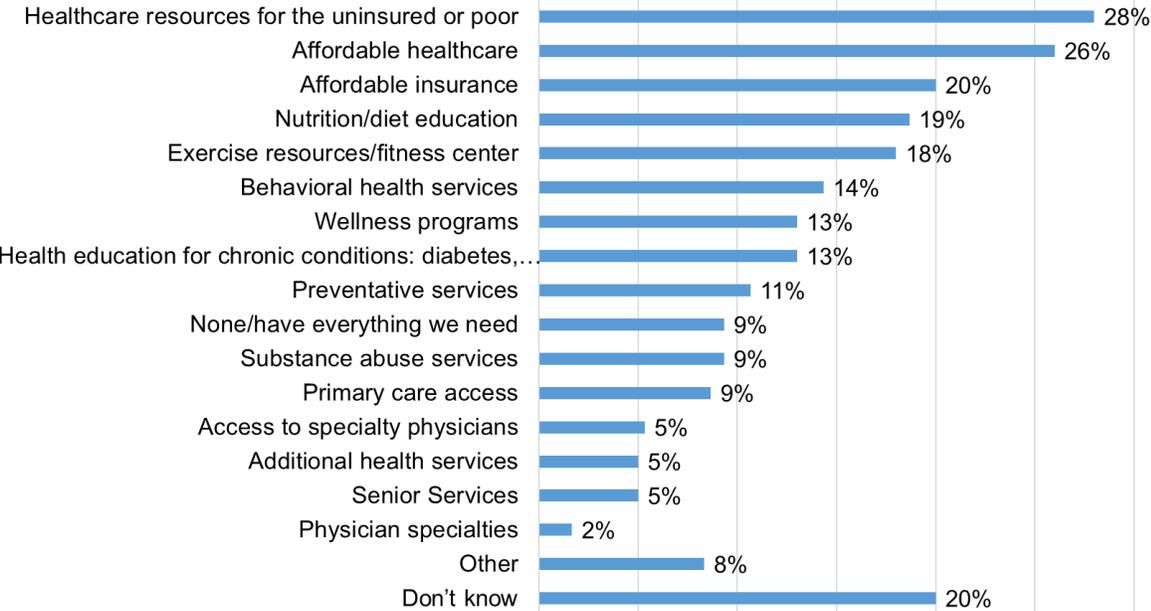
What do you need in order to manage your health condition(s)?



22% do not feel they have all they need to manage their health conditions. They need financial assistance and affordable healthcare/insurance.

Healthcare, Health Education or Public Health Services or Programs

What healthcare, health education or public health services or programs would you like to see offered in your community?



Respondents would like to see healthcare resources for the uninsured or poor followed by affordable healthcare and affordable insurance.

Health influencers

In your opinion, which are the top 3 factors that influence how healthy someone is?



Good health practices followed by avoidance of bad practices then genetics and family history are the top three factors that influence health.

Health Status Data

Based on the 2018 County Health Rankings study performed by the Robert Wood Johnson Foundation and the University of Wisconsin², Hamilton County ranked 12th healthiest County in Tennessee out of the 95 counties ranked (1= the healthiest; 95 = unhealthiest), 13th for health outcomes and 10th for health factors. Bradley County ranked 22nd healthiest county in Tennessee. 23rd for health outcomes and 21st for health factors.

County Health Rankings suggest the areas to explore for improvement in Hamilton County were: higher adult smoking, higher adult obesity percentage, lower percentage of high school graduation, higher income inequality, higher violent crime rate, and higher air pollution. The areas of strength were identified as higher access to exercise opportunities, teen births, primary care physician numbers, numbers of dentists, numbers of mental health providers, lower preventable hospital stays, higher percentage with some college, and lower injury deaths.

County Health Rankings suggest the areas to explore for improvement in Bradley County were: higher adult smoking, higher adult obesity percentage, higher physical inactivity, and higher violent crime rate. The areas of strength were identified as lower excessive drinking, higher percentage of high school graduates, and lower injury deaths.

When analyzing the health status data, local results were compared to Tennessee, the U.S. (where available), and the top 10% of counties in the U.S. (the 90th percentile). Where Hamilton and Bradley Counties' results were worse than TN and U.S., groups and individuals have an opportunity to act and improve these community measures. To become the healthiest community in Tennessee and eventually the Nation, Hamilton and Bradley Counties must close several lifestyle gaps. For additional perspective, Tennessee was ranked the 42nd healthiest state out of the 50 states. (Source: 2018 America's Health Rankings)

² *The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. Building on the work of America's Health Rankings, the University of Wisconsin Population Health Institute has used this model to rank the health of Tennessee's counties every year since 2003.*

Comparisons of Health Status

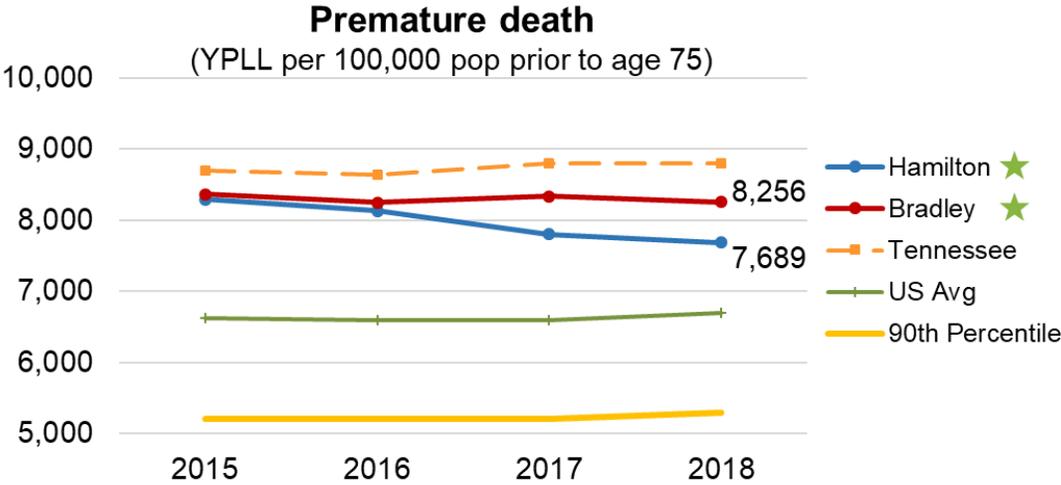
Information from County Health Rankings and America’s Health Rankings was analyzed in the CHNA in addition to the previously reviewed information and other public health data. Other data analyzed is referenced in the bullets below, such as: causes of death, demographics, socioeconomics, consumer health spending, focus groups, and surveys. Data for Tennessee, the U.S. or the top 10% of counties (90th percentile) were used as comparisons when available. If a measure was better than Tennessee, it was identified as a strength, and where an indicator was worse than Tennessee, it was indicated an opportunity for improvement. To prevent strengths from becoming opportunities for improvement, it’s important to continually focus on them. Opportunities were denoted with red symbols, and strengths were denoted with green stars for easy interpretation. The years displayed on the County Health Rankings graphs show the year the data was released. The actual years of the data are contained in the source notes below the graphs.

Health Outcomes (Length of Life and Quality of Life)

Health Outcomes are a combination of length of life and quality of life measures. Hamilton County ranked 13th and Bradley County ranked 23rd in Health Outcomes out of 95 Tennessee counties.

Length of Life

Length of life was measured by years of potential life lost per 100,000 population prior to age 75, lower is better. For example, if a 25-year-old is killed in an accident, that is 50 years of potential life lost prior to age 75. Hamilton County ranked 6th in length of life in TN. Hamilton County lost 7,689 years of potential life per 100,000 population which is lower than TN, but higher than the U.S. Bradley lost 8,256 YPLL per 100,000 population.



Source: County Health Rankings; National Center for Health Statistics – Mortality File 2012-2014

Leading Causes of Death: Age-Adjusted Death Rates per 100,000

Cause of Death	Hamilton County	Bradley County	Tennessee	US
Heart diseases	188.8	208.7	202.2	165.0
Cancer	157.6	164.0	173.4	152.5
Respiratory Diseases	55.9	67.1	57.4	49.4
Accidents (Unintentional Injuries)	46.5	67.1	63.0	40.4
Alzheimer's Disease	47.8	57.9	46.7	31.0
Cerebrovascular Diseases	50.4	47.6	45.0	37.6
Diabetes	22.6	***	24.0	21.5
Influenza and Pneumonia	7.9	20.3	21.3	14.3
Suicide	18.3	***	16.8	14.0
Kidney Disease	11.7	***	14.4	13.0

Source(s): Wonder CDC.gov (2017)

Red areas had death rates higher than the state. The leading causes of death in Hamilton and Bradley County were heart disease followed by cancer, like TN and the U.S. Lagging as causes of death were respiratory diseases, accidents, Alzheimer's Disease, stroke, diabetes, influenza and pneumonia, suicide and kidney disease. Suicide deaths were slightly higher in Hamilton County than TN and the U.S.

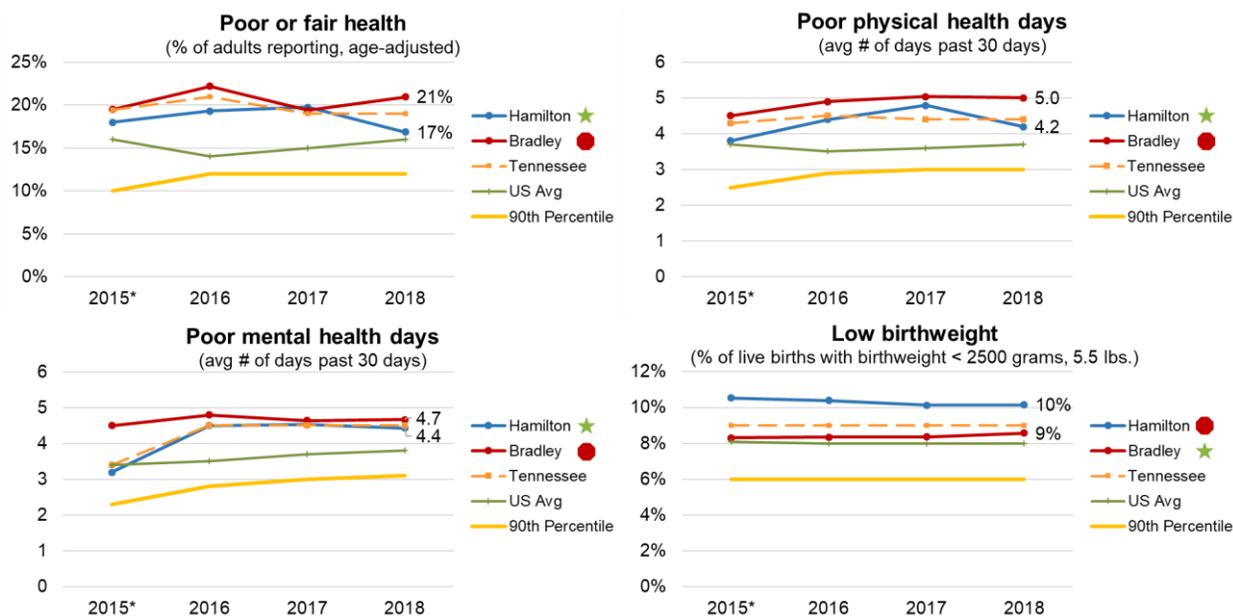
In Tennessee, the white death rate per 100,000 population was 892 and the black death rate per 100,000 population was 974.

In most of the following graphs, Hamilton County will be blue, Bradley County will be red, Tennessee (TN) will be orange, U.S. green and the 90th percentile of counties in the U.S. gold. *indicates a change in the BRFSS Survey calculations of results. 2016 forward cannot be compared to prior year results.



Quality of Life

Quality of life was measured by: % reporting fair or poor health, the average number of poor physical health days and poor mental health days in the past 30 days, and % of live births with birthweight less than 2500 grams, or 5.5 lbs. Hamilton County ranked 26th and Bradley ranked 46th in Tennessee for quality of life.



Source: County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS) 2016 Source: County Health Rankings; National Center for Health Statistics – Natality files (2010-2016)

Quality of Life STRENGTHS

- Years of potential life lost per 100,000 population prior to age 75 in Hamilton and Bradley Counties were lower than TN.
- Hamilton County had lower death rates for heart disease, cancer, respiratory diseases, accidents, diabetes, influenza & pneumonia and kidney disease than TN. Bradley County had lower death rates for cancer and influenza & pneumonia.
- Hamilton County had a lower percentage of adults reporting poor or fair health.
- Hamilton County had lower average number of poor mental health days in the past 30 days at 4.4 days.
- Hamilton also had a lower number of poor mental health days in the past 30 days at 4.2.
- Bradley County had a lower percentage of low birthweight babies at 9%.

Quality of Life OPPORTUNITIES

- Hamilton County had higher death rates than Tennessee for Alzheimer's Disease, cerebrovascular disease and suicide. Bradley County had higher death rates for heart disease, respiratory disease, accidents, Alzheimer's Disease and cerebrovascular disease than TN.
- Bradley County had a 21% of adults reporting poor or fair health which is a higher percentage than TN and the U.S. The survey resulted in 30% reporting poor or fair health in the 2 counties.
- Bradley County had a higher average number of poor physical health days than TN and the U.S. with 5.0 poor physical health days out of the past 30 days.
- Bradley County had a higher average number of poor mental health days than TN and the U.S. with 4.7 poor mental health days out of the past 30 days.
- 10% of Hamilton County births were less than 5.5 lbs., or considered low birthweight which was more than TN and the U.S.

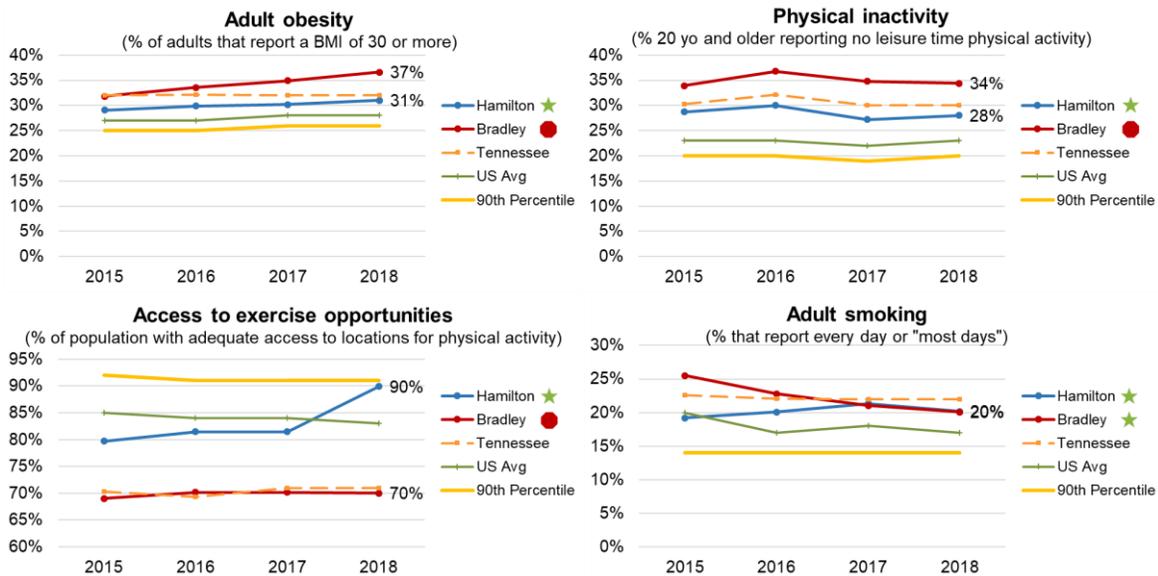


Health Factors or Determinants

Health factors or determinants rankings are comprised of measures related to health behaviors (30%), clinical care (20%), social & economic factors (40%), and physical environment (10%). Hamilton County ranked 10th and Bradley County ranked 21st out of 95 counties in Tennessee.

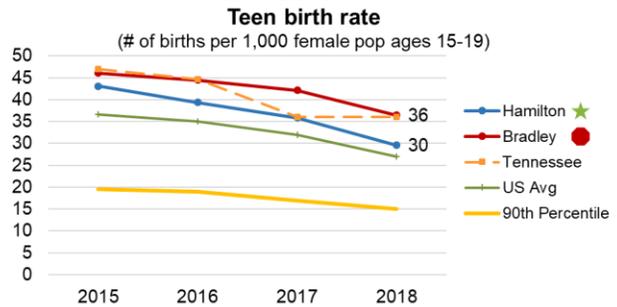
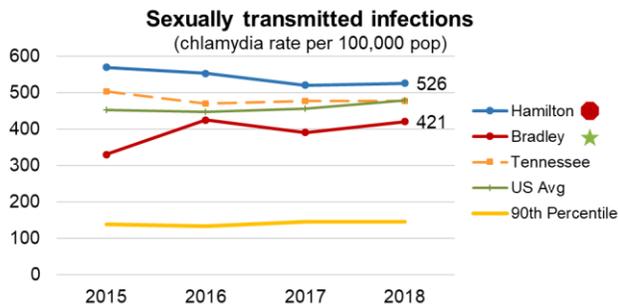
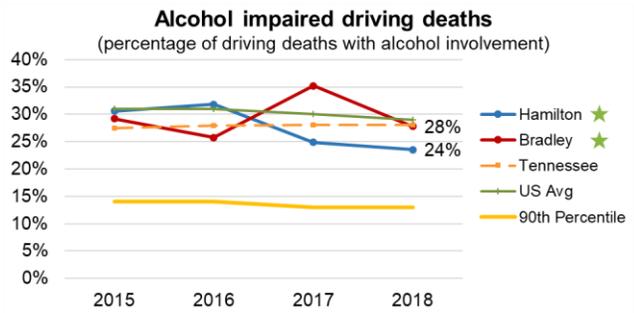
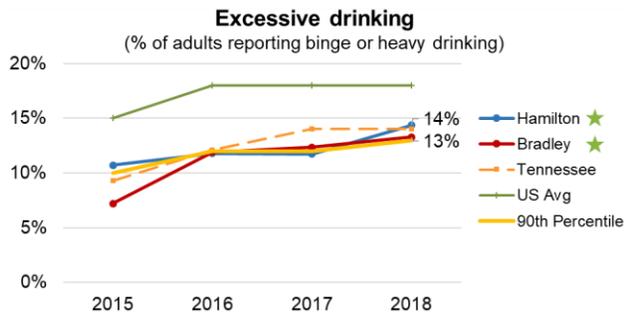
Health Behaviors

Health behaviors are made up of nine measures and account for 30% of the county rankings. Hamilton County ranked 9th and Bradley County ranked 39th out of 95 counties in Tennessee.

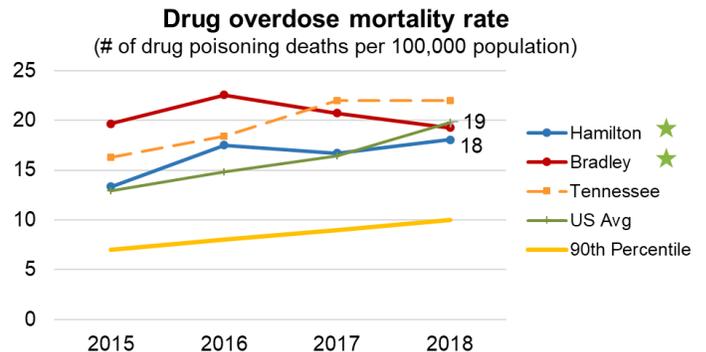
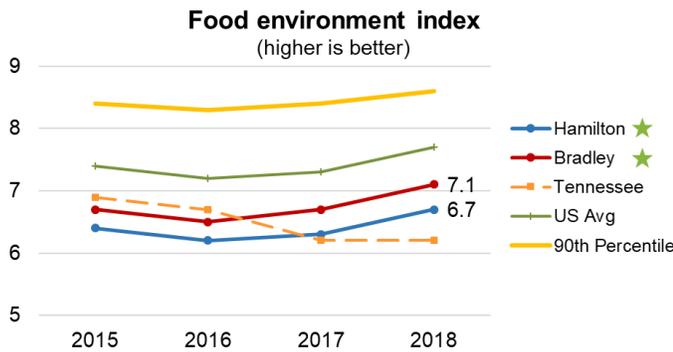


Source: Obesity, physical inactivity - County Health Rankings; CDC Diabetes Interactive Atlas based on responses to BRFSS, 2014 Source: Access to exercise opportunities - County Health Rankings; ArcGIS Business Analyst, Delorme map data, Esri and U.S. Census Tigerline Files, 2016. Measures the percentage of individuals in a County who live reasonably close to a location for physical activity, defined as parks or recreational facilities (local, state national parks, gyms, community centers, YMCAs, dance studios and pools) Source: Smoking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2016

Health Behaviors, Cont.



Source: Excessive drinking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2016 Source: Alcohol-impaired driving deaths - County Health Rankings; Fatality Analysis Reporting System, 2012-2016 Source: STIs - County Health Rankings; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2015 Source: Teen birth rate – County Health Rankings; National Center for Health Statistics – Natality files, 2010-2016



Source: County Health Rankings; USDA Food Environment Atlas, 2015; CDC WONDER mortality data, 2014-2016

The food environment index is a comprised of % of the population with limited access to healthy foods and % of the population with food insecurity. Limited access to foods estimates the % of the population who are low income and do not live close to a grocery store. Food insecurity is the % of the population who did not have access to a reliable source of food during the past year.

Health Behaviors STRENGTHS

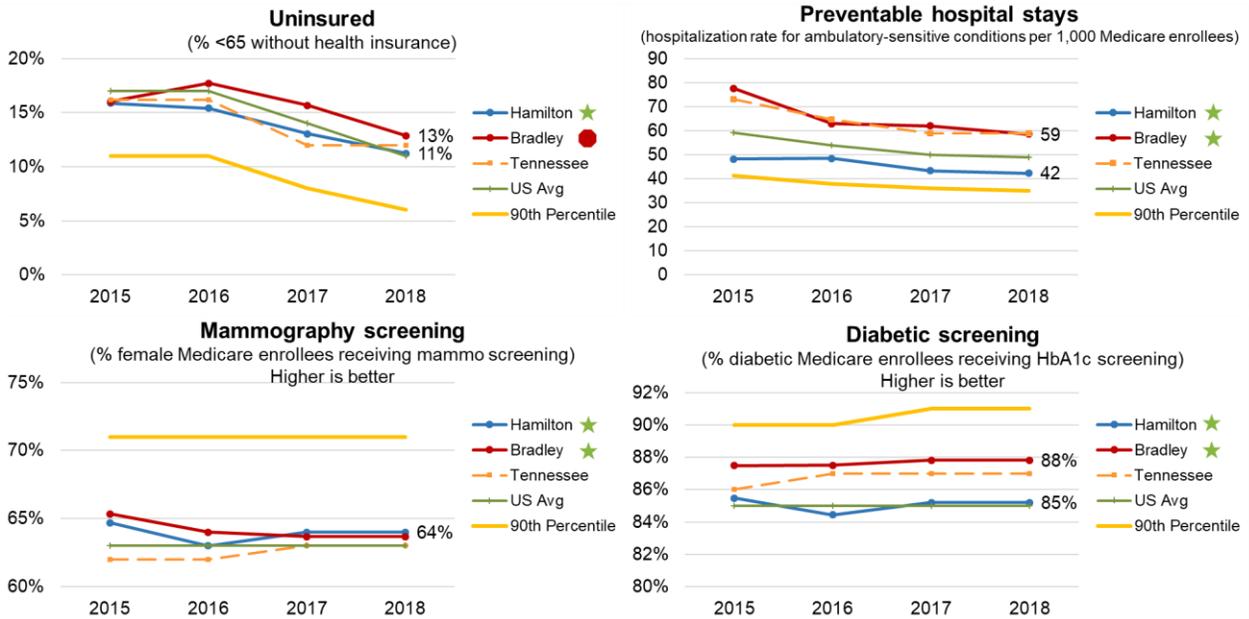
- Adult obesity in Hamilton County was 31% which was lower than TN at 32%, but higher than the U.S. at 28% and increased since 2015.
 - Physical inactivity in Hamilton County was 28% which is lower than TN at 30%.
 - Access to exercise opportunities in Hamilton County was 90% which is higher than TN at 71% and the U.S. at 83%. This has significantly increased over the past year.
 - Adult smoking was lower in Hamilton County (20%) and Bradley County (20%) than TN (22%).
 - At 13%, excessive drinking was lower in Bradley than in TN and the U.S.
 - Sexually transmitted infections measured by chlamydia rate per 100,000 population were lower in Bradley County (421) than TN and the U.S.
 - Alcohol impaired driving deaths were lower in both Hamilton County (24%) and Bradley County (28%) than in TN and the U.S.
 - Teen birth rate in Hamilton County was 30 births per 1,000 female population ages 15-19 was lower than TN at 36 births, but higher than the U.S. at 27 births and has decreased since 2015.
 - The drug overdose mortality rate in Hamilton County was 18 per 100,000 population and 19 per 100,000 in Bradley County which were both lower than TN and the U.S.
 - The food environment index was higher in both Hamilton County (6.7) and Bradley County (7.1) than TN (6.2). The rate has increased for both Counties since 2016.
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Health Behaviors OPPORTUNITIES

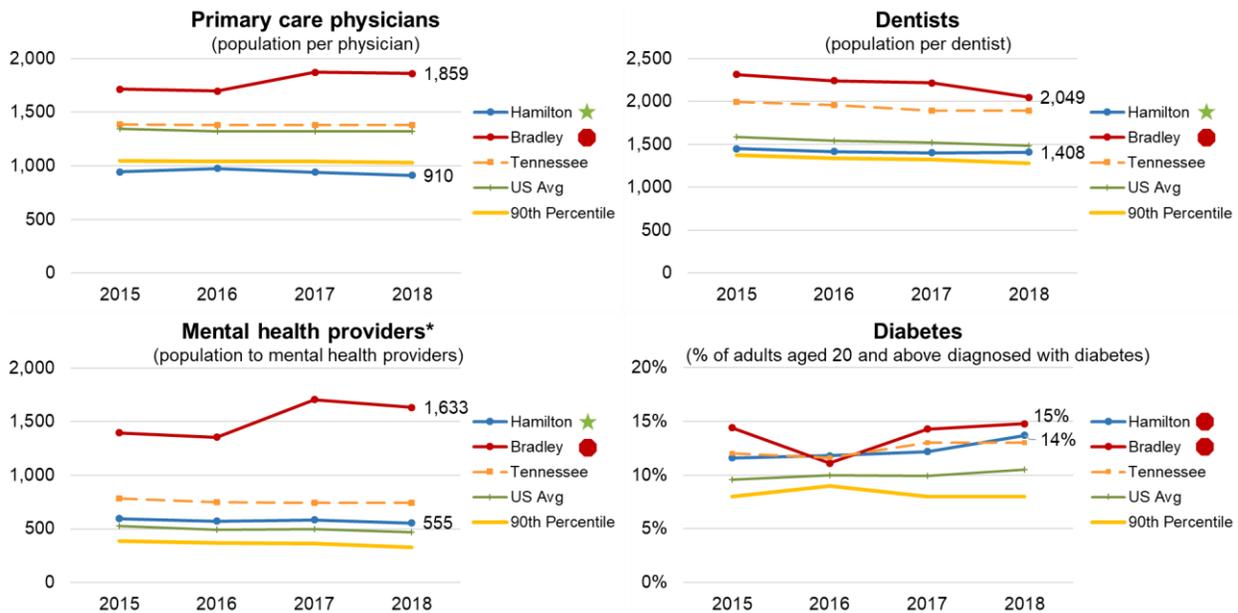
- Adult obesity in Bradley County (37%) was higher than TN and the U.S. Obesity in Tennessee and the U.S. continue to rise, putting people at increased risk of chronic diseases including: diabetes, kidney disease, joint problems, hypertension and heart disease. Obesity can cause complications in surgery and with anesthesia. It has been implicated in Alzheimer's and often leads to metabolic syndrome and type 2 diabetes.
- Physical inactivity was higher in Bradley County at 34% than TN at 20% and the U.S. at 23%.
- Access to exercise opportunities was lower in Bradley County than in TN and the U.S. at 70%.
- 14% percentage of adults reported excessive drinking in Hamilton County which was the same as TN. The percentage has increased since 2017.
- The teen birth rate was higher in Bradley County than in TN and the U.S. with 36 births per 1,000 females age 15 to 19.
- Sexually transmitted infections measured by chlamydia rate per 100,000 population were higher in Hamilton County (526) than TN and the U.S. (479).

Clinical Care

Clinical care ranking is made up of seven indicators, and account for 20% of the county rankings. Hamilton County ranked 6th and Bradley County ranked 24th out of 95 Tennessee counties in clinical care.

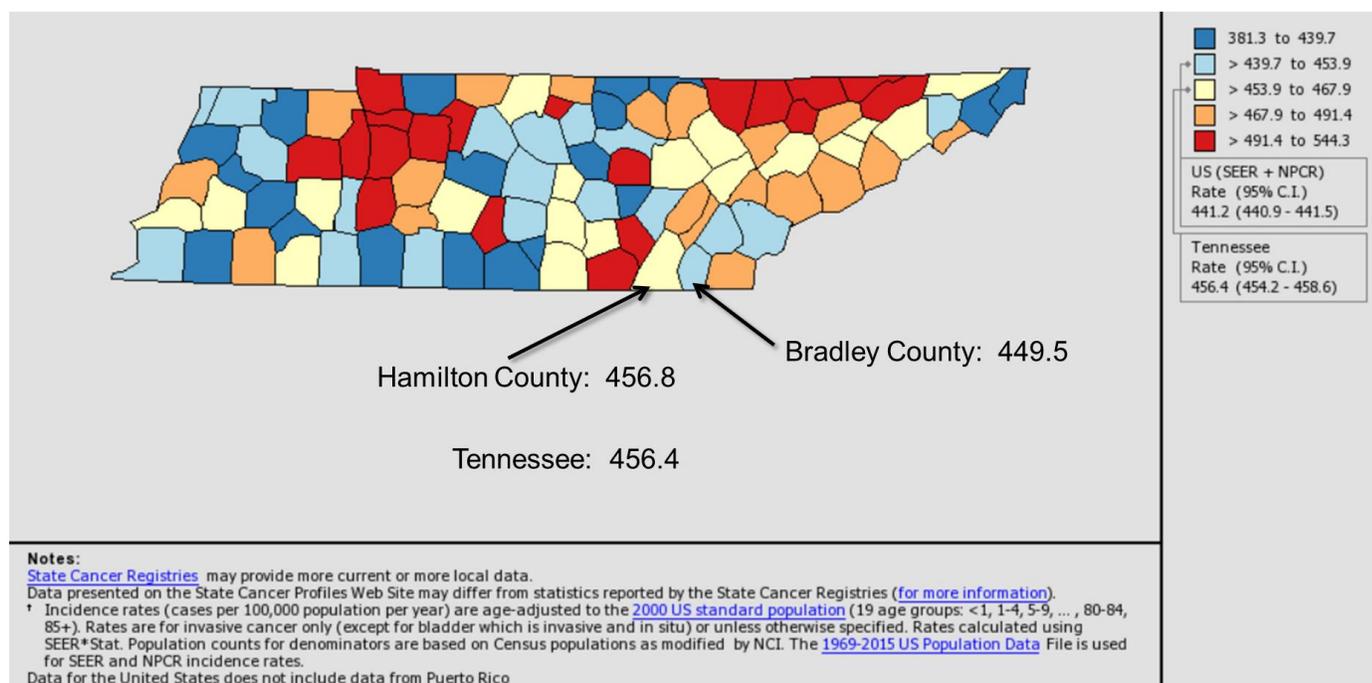


Source: Uninsured - County Health Rankings; Small Area Health Insurance Estimates, 2015
 Source: Preventable hospital stays, mammography screening, diabetic screening - County Health Rankings; Dartmouth Atlas of Health Care, Medicare claims data, 2014



Source: Pop to PCP - County Health Rankings; Area Health Resource File/American Medical Association, 2015
 Source: Pop to Dentists - County Health Rankings; Area Health Resource File/National Provider Identification file, 2016
 Source: Pop to mental health provider (psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health) County Health Rankings; CMS, National Provider Identification, 2017

Cancer Incidence Rates – TN Counties



Clinical Care STRENGTHS

- The percent of population under sixty-five without health insurance in Hamilton County was the same as the U.S. at 11%. and lower than TN 12%. Tennessee did not expand Medicaid, therefore their percent uninsured is higher than the U.S.
- Preventable hospital stays in Bradley County were 59 per 1,000 Medicare enrollees which was the same as TN. Hamilton county had a lower rate of 42 per 1,000 Medicare enrollees.
- The percent of diabetic Medicare enrollees receiving diabetic screening was 88% in Bradley County which was higher than TN (87%) and the U.S. (85%).
- The percent of female Medicare enrollees receiving mammography screening was 64% in both Hamilton Bradley Counties which was higher than TN and the U.S.
- The population per primary care physician was lower in Hamilton County than TN and the U.S. at 910 people per primary care physician.
- The population per dentist was lower in Hamilton County than TN and the U.S. at 1,408 population per dentist.
- The population per mental health provider was lower in Hamilton County than TN but higher than the U.S. at 555 population per mental health provider
- The cancer incidence rate in Bradley County was 449.5 cases per 100,000 population which was lower than TN at 456.4 cases.

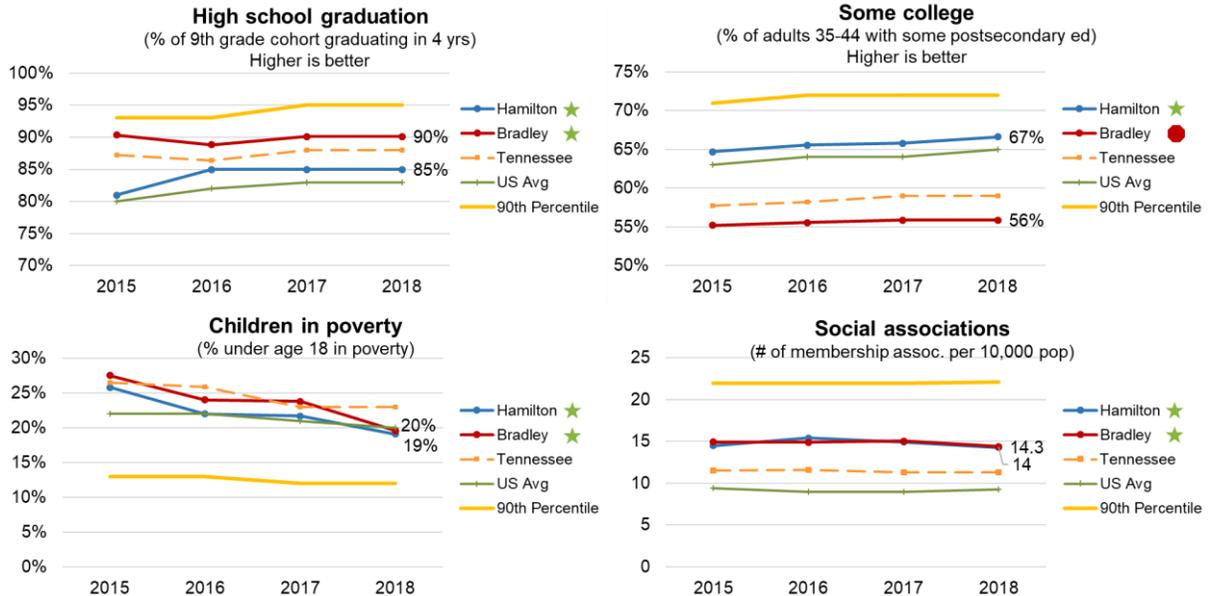
Clinical Care OPPORTUNITIES

- The percent of population under sixty-five without health insurance was 13% in Bradley County, which was higher than TN at 12% and the U.S. at 11%.
- The percent of diabetic Medicare enrollees receiving diabetic screening was 85% in Hamilton County which was lower than TN (87%).
- The population per mental health provider was higher in Bradley County than TN and the U.S. at 1,633.
- The percent of adults over 20 who had been diagnosed with diabetes was 14% in Hamilton County, and 15% in Bradley County which were higher than TN and the U.S. This percent is trending upward for both counties.
- The population per primary care physician was higher in Bradley County than TN and the U.S. at 1,859.
- The population per dentist was higher in Bradley County than TN and the U.S. at 2,049.
- The cancer incidence rate in Hamilton County was 456.8 cases per 100,000 population which was higher than TN (456.4).

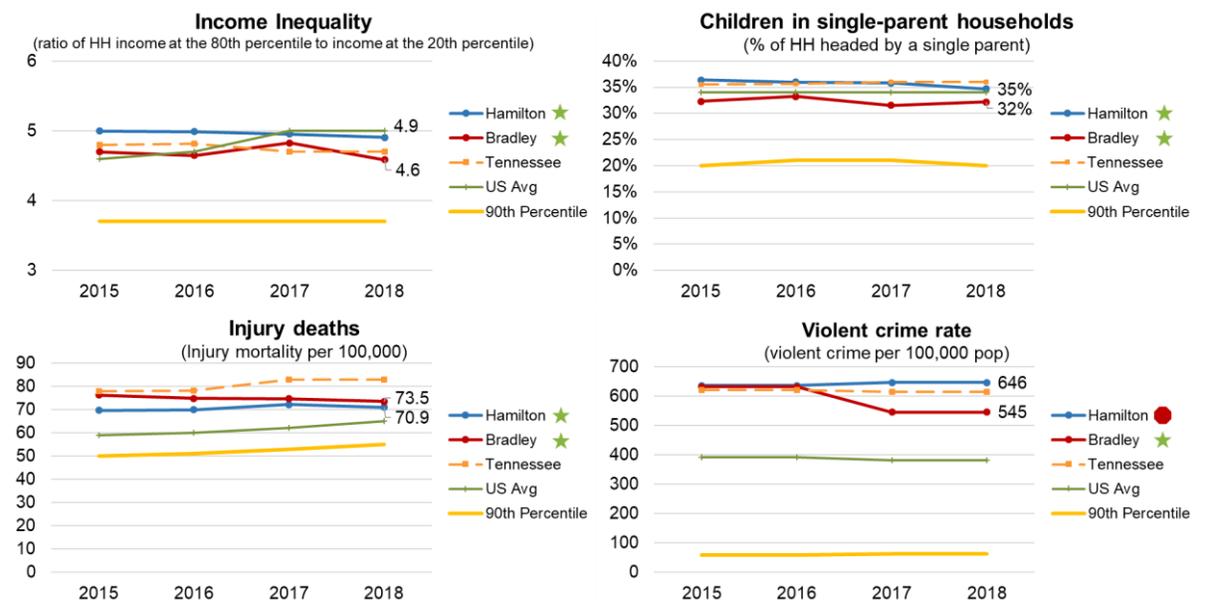
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Social & Economic Factors

Social and economic factors account for 40% of the county rankings. There are eight measures in the social and economic factors category. Hamilton County ranked 17th and Bradley County ranked 13th out of 95 Tennessee counties.



Source: High School graduation – County Health Rankings; States to the Federal Government via ED Facts, 2014-2015 Source: Some college - County Health Rankings; American Community Survey, 5-year estimates, 2012-2016. Source: Children in poverty - County Health Rankings; U.S. Census, Small Area Income and Poverty Estimates, 2016 Source: Social associations - County Health Rankings; County Business Patterns, 2015



Source: Income inequality - County Health Rankings; American Community Survey, 5-year estimates 2012-2016. Source: Children in single parent households - County Health Rankings; American Community Survey, 5-year estimates, 2012-2016. Source: Injury deaths – County Health Rankings; CDC WONDER mortality data, 2012-2016. Source: Violent crime - County Health Rankings; Uniform Crime Reporting – FBI, 2012 - 2014

Social & Economic Factors STRENGTHS

- High school graduation was higher in Bradley County at 90% than TN at 88% and the U.S. at 83%.
 - Social associations were higher in Hamilton County at 14 and Bradley County at 14.3 memberships per 10,000 population than TN at 11 and the U.S. at 9 memberships. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.
 - The children in poverty rate was lower for both Hamilton (19%) and Bradley (20%) Counties than TN (23%). Both counties have experienced a significant decrease since 2015.
 - In Hamilton County 67% of adults had some postsecondary education which was higher than TN (59%).
 - Injury deaths were lower in Hamilton County (70.9 per 100,000) and in Bradley County (73.5 per 100,000) than in TN (83 per 100,000).
 - At 4.6, income inequality was lower in Bradley County than in TN and the U.S.
 - The percentages of children in single-parent households were 35% in Hamilton County and 32% in Bradley County which was lower than TN at 36%.
 - The violent crime rate in Bradley County at 545 violent crimes per 100,000 population which was lower than in TN at 614 but higher than the U.S at 380.
-

Social & Economic Factors OPPORTUNITIES

- High school graduation was lower in Hamilton (85%) than in TN (88%), but higher than the U.S. (83%).
 - In Bradley County 56% of adults had some postsecondary education which was lower than TN (59%).
 - Income inequality represents the ratio of house hold income at the 80th percentile compared to income at the 20th percentile. At 4.9, income inequality was higher in Hamilton County than in TN and the U.S.
 - Violent crime per 100,000 population was higher in Hamilton County at 646 violent crimes per 100,000 population than in TN at 614.
 - The percentage of adults 35-44 years old with some postsecondary education was lower in Bradley County at 56% than TN and the U.S.
-



Physical Environment

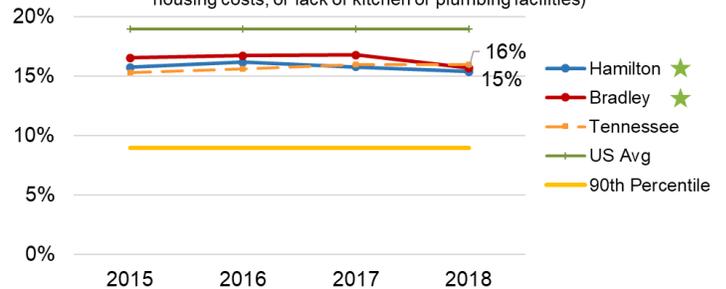
Physical environment contains four measures in the category and accounts for 10% of the County rankings. Hamilton County ranked 70th and Bradley County ranked 60th out of 95 Tennessee counties in physical environment.

Drinking water violations

	2016	2017	2018
Hamilton County	No	No	No
Bradley County	No	No	No

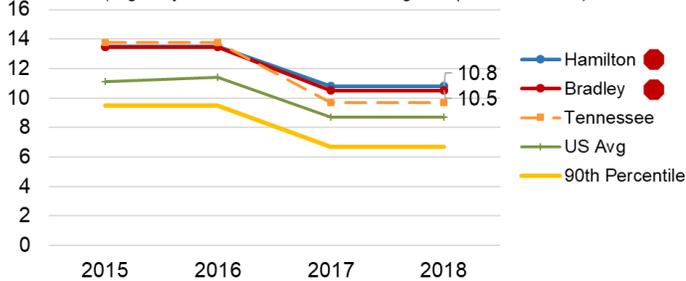
Severe housing problems

(% of hh with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities)



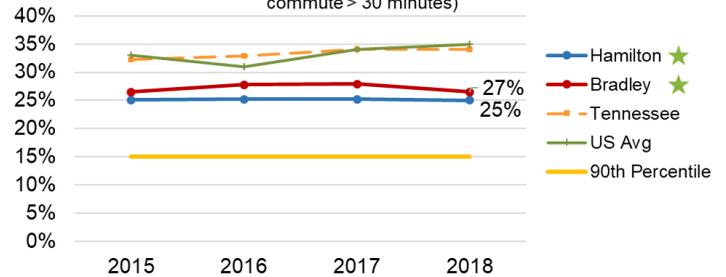
Air pollution - particulate matter

(avg daily measure of matter in micrograms per cubic meter)



Long commute- driving alone

(among workers who commute alone, the % that commute > 30 minutes)



Source: Drinking water violations – County Health Rankings; EPA, Safe Drinking Water Information System, 016. Source: Severe housing problems – County Health Rankings; HUD Comprehensive Housing Affordability Strategy data, 2010-2014. Source: Driving alone to work and long commute – County Health Rankings: American Community Survey, 5-year estimates, 2012-2016. Source: Air pollution – County Health Rankings: CDC National Environmental Health Tracking Network, 2012

Physical Environment STRENGTHS

- Hamilton and Bradley Counties had no drinking water violations.
- Hamilton County had a lower percentage of severe housing problems than TN and the U.S. at 15%. Bradley County had the same percentage of severe housing problems as TN at 16%, and a lower percentage than the U.S at 19%.
- 25% of workers in Hamilton County and 27% of workers in Bradley County who commute alone commute over 30 minutes which was lower than TN, and the U.S.

Physical Environment OPPORTUNITIES

- The average daily measure of matter in micrograms per cubic meter at 10.8 in Hamilton County and at 10.5 in Bradley County were higher than TN and the U.S.

There were Four Broad Themes that Emerged in this Process:

- Hamilton and Bradley Counties need to create a “Culture of Health” which permeates throughout the towns, employers, churches, and community organizations to engender commitment to health improvement.
 - There is a direct relationship between health outcomes and affluence (income and education). Those with the lowest income and education generally have the poorest health outcomes.
 - While any given measure may show an overall good picture of community health, subgroups such as the census tracts south of Main St., may experience lower health status measures.
 - It will take a partnership with a wide range of organizations and citizens pooling resources to meaningfully impact the health of the community. However, the counties have many assets to improve health.
-



Photo Credit Outdoor Chattanooga website

Results of the CHNA: Community Health Summit Prioritized Health Needs, Goals and Actions

Prioritization of Health Needs

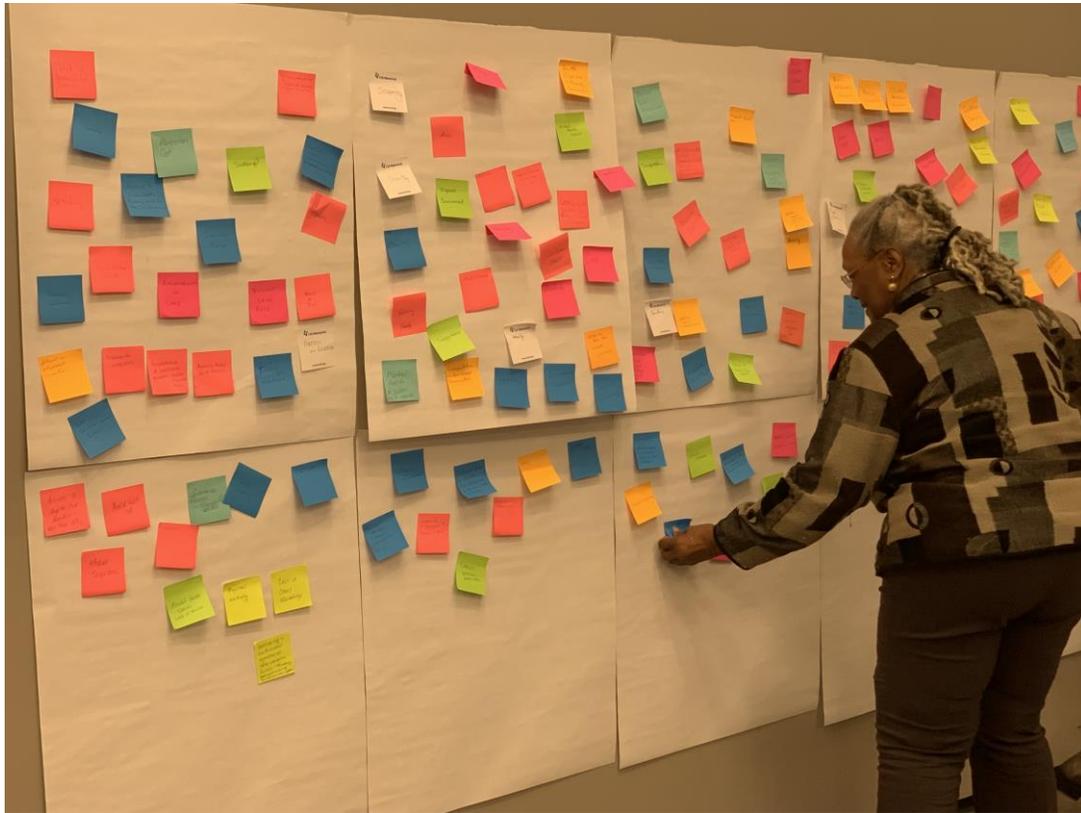


Photo Credit Stratasan

Prioritization Criteria

At the Community Health Summit, the attendees reviewed the community health information and used the criteria below to prioritize the health needs in the community.

<p>Magnitude / scale of the problem</p>	<p>How big is the problem? How many people does the problem affect, either actually or potentially? In terms of human impact, how does it compare to other health issues?</p>
<p>Seriousness of Consequences</p>	<p>What degree of disability or premature death occurs because of this problem? What would happen if the issue were not made a priority? What is the level of burden on the community (economic, social or other)?</p>
<p>Feasibility</p>	<p>Is the problem preventable? How much change can be made? What is the community's capacity to address it? Are there available resources to address it sustainably? What's already being done, and is it working? What are the community's intrinsic barriers and how big are they to overcome?</p>

Most Significant Community Health Needs

The following needs were prioritized by attendees at the Community Health Summit. Using a nominal group technique, each attendee received three sticky notes and selected their top three health needs and posted their ideas on paper at the front of the room. The results of the activity are below with higher numbers indicating the number of “votes” or priority by topic. The bullets below the health need are many of the comments received on the sticky notes.

1. Mental health

2. Obesity

3 (tie). Access to care and insurance

4 (tie). Physical inactivity and lifestyle

5. Substance abuse disorder

1. Mental health (28 sticky notes)

- Mental health issues / healthcare
- Mental wellness
- Lack of services
- Access to affordable housing for individuals with mental illness
- Mental health of children due to trauma
- Healthcare literacy
- Isolation, depression, suicide

2. Obesity – healthy eating, active living (26 sticky notes)

- Hunger
- Obesity and Diabetes
- Physical inactivity
- Access to healthy affordable food
- Nutrition- real food, affordable, education, esp. sugar

3 (tie). Access to care and insurance (25 sticky notes)

- Access to resources, care, drugs, screening
- Access to health care providers- more than MDs
- Access to affordable healthcare, services, treatments, medicines
- Access to healthcare for seniors
- Access to medications for chronic conditions
- Access to care for uninsured, underinsured
- Alternative health solutions
- More African American health care professionals- our MDs to community for awareness
- Transportation- especially in low income communities
- Lack of affordable insurance
- Online access to health data for Hamilton County

6. Smoking

7. Chronic diseases

8. Resources and education

9. Safety

- Mobile clinics- especially in the low-income neighborhoods
- Health education motivation
- Transitional housing
- Fragmentation of Healthcare providers- Hospitals, Physicians, Payors
- Lack of affordable healthcare, housing, food, adequate transportation
- Identification of health- city and county councils to educate, assess, address

3 (tie). Physical inactivity and lifestyle (25 sticky notes)

- Priority, interest, access to physical activity opportunities
- Physical environment
- Nutrition
- Assessment of availability of healthy foods in neighborhoods – identification and elimination of “Food Deserts”
- Motivation
- Personal responsibility
- Sedentary lifestyle
- Developing a health mindset regardless of socio-economic factors- elevating good health as part of our community center
- Awareness/ education
- Preventative/ health promotions resources- health departments infrastructure

4. Substance abuse disorders (15 sticky notes)

- Substance abuse – marijuana, opioid, tobacco, E-cigs, pot
- Mental health and substance abuse
- Opioid abuse, addiction, crisis, overdose, epidemic
- Prescription drug prevention
- Drug overdose from prescription or street access
- Health education

Most Significant Community Health Needs Continued

5. Smoking (12 sticky notes)

- Smoking, vaping, tobacco use
- Smoking rates
- Leads to cancer and chronic disease

6. Chronic diseases (9 sticky notes)

- Heart disease
- Diabetes
- Respiratory needs
- Cancer treatment and screening

7. Resources and education (8 sticky notes)

- Responsible parents
- Insufficient education
- Not having adequate sex education- Higher teen pregnancy, likelier to have risky sex
- Recourses of caregivers
- Immigrant Health
- Senior fall prevention
- Family breakdown
- Need for community paramedicine unit

8. Safety (6 sticky notes)

- Safety
- Violence- Children exposed to trauma or living in violent households
- Violent crime rate
- Pollution



Photo Credit Stratasan

Community Health Summit Brainstorming

Community Health Goals and Actions

The most significant health needs coalesced into nine categories. Table groups then brainstormed two goals and two actions for each goal along with resources and collaborators needed. The brainstorm results are below.

Significant Health Need 1: Mental health

✓ **Goal 1 - Develop and hold mental health workshops in specific targeted areas as identified by best available data**

Action 1 - Measure the level of stigma using a pre/post survey.

Action 2 - Create audience targeted workshops.

✓ **Goal 2 - Develop social media campaign to emphasize awareness and resources for mental health**

Action 1 - Develop online communities to promote discussions about mental health issues.



Significant Health Need 2: Obesity - healthy eating, active living

- ✔ **Goal 1 - Continue the current trend of reducing obesity by 2% by 2021**
Action 1 - Publicize and increase community wellness activities and events.
Action 2 - Replicate the Get Fit Challenge in Hamilton and Bradley County and make BMI a vital sign.
Resources/ Collaborators Needed: homeless coalition, health department, social media, Department of Education, social media campaigns

 - ✔ **Goal 2 - Educate the public for a better understanding of what obesity is and nutritional food**
Action 1 – Host health fairs within community places.
Action 2 - Make healthy food more affordable and available.
Resources/ Collaborators Needed: nutritionist, schools, churches, local supermarkets
-

Significant Health Need 3 (tie): Access to care and insurance

- ✔ **Goal 1- Chronic diseases patients to increase visits with care providers by 15% in 1 year**
Action 1- deploy health options for chronic disease in various social service organizations- cost effective
Action 2 - Extend care providers (physically) to social organizations (churches)
Resources/ Collaborators Needed: health care providers, service organizations: nursing schools (Southern Adventist University, Lee University, University of Tennessee at Chattanooga), churches libraries etc.

 - ✔ **Goal 2- Increase transportation options for the underserved by 15% in 1 year**
Action 1- partner with public transportation, Uber, Lyft to discount trips to/from health providers
Action 2 - Work with other organization, especially, churches, schools to make buses available for patients during down time
Resources/ Collaborators Needed: public transportation, Uber, Lyft, schools, churches (church buses), social organizations, grants, collaborate with the faith-based health council
-

Significant Health Need 3 (tie): Physical inactivity and lifestyle

- ✔ **Goal 1 - Increase by 25% availability of sidewalks and offer social/ community opportunity in most needed neighborhoods by 2022**
Action 1 – Identify and solidify key resident support.
Action 2 – Identify and secure funding form grants and city/county budgets.
Resources/ Collaborators Needed: city transportation, city council, county commissioner, mayors

 - ✔ **Goal 2 – Deploy two mobile units (markets, trainers, incentive wellness app use, etc.) in most needed areas by 2021**
Action 1 – Build partnership with YMCA, identify partners for donating food, and teach residents to cook.
Action 2 – Identify and secure funding from grants and city/county budgets, identify and solidify key resident support.
Resources/ Collaborators Needed: YMCA, local farmers, grocery store
-

Significant Health Need 4: Substance abuse



Goal 1 – Increase utilization of local resources by 20%

Action 1 - Include awareness of local resources for treatment within the community.

Action 2 – Create and implement a communication plan to local businesses, police, churches, and health systems.

Resources/ Collaborators needed: schools, churches, regional health department



Goal 2 – Convene local resources and hospital systems to determine and execute a unidirectional way forward

Action 1 - Bring local resources to the table.

Action 2 - Develop a Chattanooga community plan.

Action 3 - Commit funds and resources to goal and determine % measure needed.

Significant Health Need 5: Smoking



Goal 1 –Hamilton/ Bradley County’s nicotine use (all forms and all ages) will decrease within 3 years

Action 1 - Begin “no nicotine use” education in elementary schools.

Action 2 –Work with local resources to develop and distribute education to elementary schools.

Action 3 - Include all levels of nursing navigators in the community.

Resources/ Collaborators needed: Schools, community resources, regional health department, churches



Goal 2 – Ongoing: All cancer patients will receive smoking cessation education prior to treatment

Action 1 – Educate primary care providers and help develop processes to implement.

Action 2- Educate navigators that all patients will receive smoking cessation education and develop processes to help.

Resources/ Collaborators needed: schools, churches, regional health department, primary care providers, medical society

Significant Health Need 6: Chronic diseases



Goal 1 - Education (cultural relevant)

Action 1 - More communication in the health care provider setting.

Action 2 - Community knowledge that health care providers can be rated and reviewed.

Action 3 - An advocate in the community who can reach the audience. They must be able to relate in the community.



Goal 2 – Prevention

Action 1 - Educate physicians on how they should assist clients with specific information and guidelines.

Action 2 - Health consumers need to be proactive.

Action 3 - Education about HIV/ other preventable diseases and how to prevent them. For example, condom use.

Action 4 - More education about accessing care and being proactive to encourage to decrease preventable health issues.

Significant Health Need 7: Resources and education

- ✔ **Goal 1 – Identify and support resources in the community addressing these issues**
 - Action 1** – Enhance organizations that are already doing this and drive collaboration.
 - Action 2** – Educate community stakeholders of the resources available to deal with underlying problems.
Resources /collaboration needed: community stakeholders, schools, churches, hospitals, local businesses

 - Goal 2 – Map out where services are**
 - ✔ **Action 1** – Regularly update services that are available and provide information on where to get them.
 - Action 2** – Understand how to get the best information to clients and providers.
Resources /collaboration needed: communication networks
-

Significant Health Need 8: Safety

- ✔ **Goal 1 – Clearly define the causes of crimes in our community**
 - Action 1** – Determine the top 3 types of crime.
 - Action 2** – Research and understand these top 3 types of crime identified in action 1 (why, when, where, and who?)
Resources /collaboration needed: TBI, County police

- ✔ **Goal 2 – Identify and support resources in the community that are currently addressing underlying causes of top crime**
 - Action 1** – Create ways and gather resources to support organization's currently addressing need. Enhance what established organization's are currently doing.
 - Action 2** – Educate the community and stake holders about the resources available to addressing issues and causes of crime.

Impact of 2016 CHNA and Implementation Plan

Impact

In 2016, the Hamilton County, Tennessee and Walker and Catoosa County, Georgia communities prioritized the following health needs:

1. **Obesity**
2. **Substance abuse (tobacco, alcohol, drugs)**
3. **Access – care and insurance**
4. **Physical inactivity/lifestyle**
5. **Education**
6. **Mental health**
7. **Crime/violence/social issues**
8. **Chronic diseases**
9. **Aging**

CHI Memorial Chattanooga developed implementation strategies to address substance abuse, access, healthy lifestyles, violence, health disparities/access to care and senior care over the last three years.

CHI Memorial did not address the issues of mental health, education, chronic diseases, and obesity

Below are the results of the implementation efforts.

1. Screening and education for lung cancer patients have improved outcomes (early diagnosis) and awareness.
2. Mobile mammography improved access to care in Catoosa, Walker, and Dade counties.
3. A teen dating violence program extended violence-prevention awareness into area schools and churches.
4. A fall-prevention program – A Matter of Balance – extended fall-prevention education to area seniors.
5. A strengthened YMCA partnership supported better community outreach to address health disparities.
6. Progress has been made in CHI Memorial's service to patients with co-existing addiction and mental health issues.
7. The establishment of a Community Health Ministry Network has connected 13 local faith communities with the health system.
8. A partnership with the North Georgia Chamber of Commerce has supported community education regarding quality of life and health status issues.

Community Assets and Inventory

Community Asset Inventory

The separate document contains a list of community assets and resources that can help improve the health of the community and assist with implementation of the plan accompanies this document. The focus group also identified community resources to improve health, which are listed on page 21.



Community Health Needs Assessment for Hamilton and Bradley Counties

completed by CHI Memorial Chattanooga in partnership with:

Stratasan

