Saint Thomas Highlands Hospital
Community Health Needs Assessment
White County, Tennessee

2016

Photo credit: Chuck Sutherland, used with permission; Lower Great Falls, Rock Island State Park
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The Community Health Needs Assessment (CHNA) defines priorities for health improvement, creates a collaborative community environment to engage stakeholders, and provides an open and transparent process to listen and truly understand the health needs of White County, Tennessee. Saint Thomas Highlands Hospital has not previously conducted a CHNA, as it had been an investor-owned facility and
Saint Thomas Health Regional Hospitals’ Board of Directors will approve and adopt this CHNA, along with the associated Implementation Strategy.

This report will be made widely available to the community via Saint Thomas Health’s website: http://www.sthealth.com/about-us/mission-integration/community/community-health-needs-assessment, and paper copies will be available free of charge at Saint Thomas Highlands Hospital.

**Project Goals**

1. To implement a formal and comprehensive community health assessment process which will allow for the identification and prioritization of significant health needs of the community, to then inform resource allocation, decision-making and collective action that will improve health.

2. To initiate 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.

**Participants**

Individuals from over thirty community and health care organizations collaborated to implement a comprehensive CHNA process focused on identifying and defining significant health needs, issues, and concerns of the White County, Tennessee. 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 and had special knowledge of or expertise in public health to provide direction for the community and hospital to create a plan to improve the health of the community.
We initiated the Community Health Needs Assessment with the goal of identifying public health needs, and setting goals, objectives and priorities,” said Bill Little, Chief Executive Officer, Saint Thomas Highlands Hospital. “It is our goal to use our findings as a foundation for improving and promoting the health of the whole community.”

“The information we 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 Saint Thomas Highlands Hospital to create an implementation plan. We hope other community organizations will join us.” added Alexandra Norton, Director, Community Health and Benefit, Saint Thomas Health. “The Community Health Summit was the final step in the assessment process. Now the real work—improving the health of the community and implementing the ideas presented—begins.

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Photo credit: Chuck Sutherland
Community

Input and Collaboration

In March 2016, Saint Thomas Highlands Hospital contracted with Stratasan to assist in conducting a Community Health Needs Assessment for White County, Tennessee. Saint Thomas Highlands Hospital sought input from persons who represent the broad interests of the community using several methods:

- Eight community members participated in a focus group for their perspectives on community health needs and issues on April 11, 2016.
- Information gathering using secondary public health sources occurred in March and April of 2016.
- Eight community members were interviewed or surveyed regarding their perspectives on community health status and needs in April 2016.
- A Community Summit was conducted on April 27, 2016 with 22 community stakeholders. The audience consisted of representatives from healthcare, the White County Health Department, government, schools, not-for-profit organizations, faith communities, and others.
Participation in the focus group, surveys and at the Community Summit creating the White County Community Health Needs Assessment and Improvement Plan:

<table>
<thead>
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<th>Organization</th>
<th>Population Represented (kids, low income, minorities, w/o access)</th>
<th>How Involved</th>
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<tr>
<td>Saint Thomas Health</td>
<td></td>
<td>Summit, Focus Group</td>
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<td>Healthy Living Magazine</td>
<td>All of the Upper Cumberlinds</td>
<td>Summit</td>
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<tr>
<td>Saint Thomas Highlands, geriatric psych</td>
<td>Geriatric Psych</td>
<td>Summit</td>
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<td>Jackson Kayak</td>
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<td>FQHC</td>
<td></td>
<td>Summit</td>
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<td>White County School System</td>
<td>Children</td>
<td>Focus Group</td>
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<td>White County Executive</td>
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<td>TN Department of Health</td>
<td>Medically underserved</td>
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<tr>
<td>NHC Sparta</td>
<td>Geriatrics/ subacute care/rehab</td>
<td>Summit</td>
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<td>NHC Homecare - Sparta</td>
<td>Home Health - All ages</td>
<td>Summit</td>
</tr>
<tr>
<td>Retired teacher</td>
<td></td>
<td>Summit</td>
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<tr>
<td>River Church of Sparta</td>
<td>All</td>
<td>Summit</td>
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<tr>
<td>Saint Thomas Regional Facilities</td>
<td>Community Healthcare</td>
<td>Summit</td>
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<td>White County Health Department</td>
<td>Community (all)</td>
<td>Summit; Interviews</td>
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<td>White County Planning Department</td>
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<td>Summit</td>
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<td>Department of Children's Services</td>
<td>Kids</td>
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<td>River Church/Cookeville Pregnancy Clinic</td>
<td>Women, those in poverty</td>
<td>Summit</td>
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<tr>
<td>Ex 47 year healthcare executive</td>
<td>all</td>
<td>Summit, Focus Group</td>
</tr>
<tr>
<td>White County School District</td>
<td>Kids, parents</td>
<td>Summit</td>
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<tr>
<td>Gary Maxwell Insurance</td>
<td></td>
<td>Focus Group</td>
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<td>Life Care Center of Sparta</td>
<td>Geriatrics</td>
<td>Summit</td>
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<td>Sparta, White County Chamber of Commerce</td>
<td>Business/quality of life</td>
<td>Summit</td>
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<td>White County Veterans Affairs</td>
<td>Veterans</td>
<td>Focus Group</td>
</tr>
<tr>
<td>White County EMS</td>
<td>All</td>
<td>Summit</td>
</tr>
<tr>
<td>Sparta, White County YMCA</td>
<td>Kids, seniors, cancer patients</td>
<td>Focus Group</td>
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<tr>
<td>Board of Directors Saint Thomas Highlands/ Minister DeRussett Church of Christ</td>
<td>Youth, Elderly</td>
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<td>Caris Healthcare</td>
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<td>Payless Family Pharmacy</td>
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<td>Health Connect America</td>
<td></td>
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<td>Saint Thomas Highlands Emergency Dept &amp; Case Mgt.</td>
<td></td>
<td>Interviews</td>
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Input of Public Health Officials

At the Summit held on April 27, 2016, Dr. Don Grisham, Upper Cumberland Regional Medical Director, and Linsey Arfsten, Patient and Community Health Educator for the White County Health Department, presented information and priorities from 2016 TN Department of Health White County Community Health Status. For more information, visit http://tennessee.gov/health/section/statistics.

Ms. Arfsten reviewed County Health Rankings recent data comparing White County to the other counties in the Upper Cumberland area in areas such as mortality, % poor or fair health, low birthweight babies, tobacco use, adult obesity, physical inactivity, access to exercise opportunities, uninsured, and the ratio of population to primary care physicians, dentists and mental health providers. She compared the Upper Cumberland results to Tennessee and a national benchmark. From these metrics, the he upper Cumberland region appeared fairly homogenous in its health needs. Some highlights of the presentation are below.
Tennessee Big Three + 1 priorities as outlined in the report were:
1. Tobacco Use
2. Obesity
3. Physical Inactivity
4. Substance Abuse

Ms. Arfsten outlined what the state and local health departments are doing relative to each of these issues.

Tobacco use
- Baby and Me Tobacco Free
- Tobacco free campus policies
- Tobacco settlement funding/T4 Peer Group

Obesity
- Eat healthy, Be active workshops
- Highlands fitness challenge

Physical Inactivity
- Highlands fitness challenge
- Afterschool walking clubs for students and families

Substance Abuse
- Educational prenatal workshops
- NAS education
- NAS reporting portal

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**Input of Medically Underserved, Low-Income and Minority Populations - Community Engagement and Transparency**

Input was received during the focus group, interviews and the summit.

**Community Engagement and Transparency**

We are pleased to share the results of the Community Health Needs Assessment with our community in hopes of attracting more advocates and volunteers to improve the health of the community. The following pages highlight key findings of the assessment. We hope the community 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 Saint Thomas Highlands Hospital.
Community

Selected for Assessment

Saint Thomas Highlands Hospital’s health information provided the basis for the geographic focus of the CHNA. The map below shows where Saint Thomas Highlands Hospital received its patients; in 2015, most of Saint Thomas Highlands Hospital’s inpatients came from White County (63%). Therefore, White County was selected as the primary focus of the CHNA.

The community included medically underserved, low-income or minority populations who live in the geographic areas from which Saint Thomas Highlands Hospital draws its patients. All patients were used to determine the service area without regard to insurance coverage or eligibility for financial assistance under Saint Thomas Highlands Hospital’s Financial Assistance Policy.

Saint Thomas Highlands Hospital Patients - 2015

Source: Saint Thomas Highlands Hospital, 2015
Key Findings
Community Health Assessment

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 of 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 survey 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.

Process and Methods

Both primary and secondary data sources were used in the CHNA. Primary methods included:
- Community focus group
- Community interviews/survey

Secondary methods included:
- Public health data – death statistics, county health rankings
- Demographics – population, poverty, uninsured
- Psychographics

Photo credit: Sparta TN Website
# Demographics of the Community

The table below shows the demographic summary of White County compared to Tennessee and the U.S.

- **Source: ESRI**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>White County</th>
<th>Tennessee</th>
<th>USA</th>
</tr>
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<tr>
<td>Population (2015)</td>
<td>26,554</td>
<td>6,585,731</td>
<td>318,536,43</td>
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<tr>
<td>Median Age (2015)</td>
<td>43.3</td>
<td>39.0</td>
<td>37.2</td>
</tr>
<tr>
<td>Annual Pop. Growth (2015-20)</td>
<td>0.55%</td>
<td>0.82%</td>
<td>0.75%</td>
</tr>
<tr>
<td>Household Population (2015)</td>
<td>10,552</td>
<td>2,591,245</td>
<td>120,746,34</td>
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<tr>
<td>Dominant Tapestry (2015)</td>
<td>Rooted Rural (10B)</td>
<td>Rooted Rural (10B)</td>
<td>Green Acres (6A)</td>
</tr>
<tr>
<td>Businesses (2015)</td>
<td>1,002</td>
<td>263,370</td>
<td>13,340,41</td>
</tr>
<tr>
<td>Employees (2015)</td>
<td>8,258</td>
<td>3,244,773</td>
<td>158,567,71</td>
</tr>
<tr>
<td>Medical Care Index® (2015)</td>
<td>73</td>
<td>88</td>
<td>10</td>
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<tr>
<td>Average Health Expenditures (2015)</td>
<td>$1,533</td>
<td>$1,839</td>
<td>$2,09</td>
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<tr>
<td>Total Health Expenditures (2015)</td>
<td>$16.2 M</td>
<td>$48 B</td>
<td>$253.3</td>
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**Racial and Ethnic Make-up**

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>White</td>
<td>95%</td>
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<tr>
<td>Black</td>
<td>2%</td>
</tr>
<tr>
<td>American Indian</td>
<td>0%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>0%</td>
</tr>
<tr>
<td>Mixed Race</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic Origin</td>
<td>2%</td>
</tr>
</tbody>
</table>

- **Source: ESRI**

**Median Household Income (2015)**

- $200K+
- $150K-$199.9K
- $100K-$149.9K
- $75K-$99.9K
- $50K-$74.9K
- $35K-$49.9K
- $25K-$34.9K
- $15K-$24.9K
- $<15K

- **Source: ESRI**
White County, Tennessee

- The population of White County was projected to increase from 2015 to 2020 (.55% per year), lower than the rate of TN at .82% and the U.S. at .75%.
- White County was older (43.3 median age) than TN and the U.S. and had lower median household income ($35,129) than both TN and the U.S.
- The medical care index measures how much the county spent out of pocket on medical care services. The U.S. index was 100. White County (73 index) spent 27% less than the average U.S. household out of pocket on medical care (doctor’s office visits, prescriptions, hospital).
- The racial make-up of White County was 95% white, 2% black, 1% mixed race, 2% other, and 2% Hispanic origin. (The numbers will total to over 100% due to Hispanic being an ethnic group, not a race)
- The median household income distribution of White County was 7% higher income (over $100,000), 59% middle income and 34% lower income (under $24,999).

### 2015 Population by Census Tract and Change (2015-2020)

Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. There were higher population census tracts, 5,000-7,999 in Sparta and north of Sparta.

The population was projected to grow most in the census tracts north of the county, .83% to 1.64%. The census tracts in Sparta and surrounding area were also growing, but not as much, .01% to .82%. One census tract in the southwest corner was projected to decline.
These maps depict median age and median income by census tract. There was an area of older population, in the southeastern part of the county. The median age in this tract is 45-54 compared to 40-44 throughout the remainder of the county. There was an area of lower median household income $1-$24,999, in Sparta and directly west of Sparta. Not all households were at the median in a census tract, but these are indicators of segments of the population that may need focused attention. The remainder of the county is in the range of $35,000 to $49,999 median household income. The Sparta census tract and north to the county line also has the highest number of households making less than $15,000.

The rate of poverty in White County was 19.9% (2009-2013 data), which was above TN (17.6%) and the U.S. (15.4%). The poverty percentage was in the middle range of contiguous counties. Putnam was highest at 26.5% and Cumberland was lowest at 17.6%.

White County’s unemployment was 5.0% compared to 5.4% for Tennessee and 5.0% for the U.S. Unemployment decreased significantly in the last few years.

Uninsured in White County was 16.7% in 2013, but for people less than 200% of poverty the percentage of uninsured was 22.7%. Approximately 19% of White County had Medicare, 27% had TennCare and 37% have other, which would most likely be insurance through an employer or private insurance.
Health Status Data

The major causes of death in White County were heart disease, followed by cancer, chronic lower respiratory disease, accidents, stroke, diabetes, Alzheimer's disease, influenza and pneumonia, kidney disease, suicide and liver disease. Source: 2012-2014 Tennessee Department of Health; CDC official final deaths 2014.

Based on the latest County Health Rankings study performed by the Robert Wood Johnson Foundation and the University of Wisconsin, White County ranked 54th healthiest county in Tennessee out of the 95 counties ranked (1 = the healthiest; 95 = unhealthiest). County Health Rankings suggest the areas to explore for improvement in White County were: adult smoking, adult obesity, physical inactivity, access to exercise opportunities, population to primary care physicians, percent of the population with some college, and injury deaths. The areas of strength were identified as lower excessive drinking, higher high school graduation, lower children in single parent households, and no drinking water violations.

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 White County's results were worse than the State and U.S., there is an opportunity for group and individual actions that will result in improved community ratings. There were several lifestyle gaps that need to be closed to move White County up the ranking to be the healthiest community in Tennessee and eventually the Nation. For additional perspective, Tennessee was ranked the 43rd healthiest state out of the 50 states.
Focus Group, Interview Results, Health Status Comparisons

Focus Group

Eight community stakeholders representing the broad interests of the community participated in a focus group for their input into the community's health. There was broad community participation in the focus group, with participants representing a range of interests and backgrounds. Below is a summary of the 90-minute discussion.

• The group described the health of the community as not very healthy when smoking. They mentioned issues with diabetes, obesity and the elderly.

• When asked about the top three issues facing the community, the group mentioned:
  • Explosion of diabetes in the schools
  • Tobacco use
  • Drug issues
  • Safety issues – no seatbelts, Four-wheeler safety

• When asked about the biggest health issues for White County the group mentioned:
  • Poor living conditions – housing environments causing asthma
  • Lack of initiative and impetus to change
  • Lack of education, drive and motivation
  • Access for TennCare and uninsured
  • High blood pressure
  • Diabetes
  • Less activity
  • Knowledge of what is available – Health Department, Hospital

• The group believed the behaviors that have the most negative impact on health are:
  • Diet – lack of discipline, fast food
  • Alcohol
  • Drugs
  • Lack of knowledge, education or motivation
  • Smoking

• The group believed the environmental factors that have the most negative impact on health are:
  • Exercise options have improved a lot in the last few years
  • Natural environment, great outdoors, great for walking
  • Doctors need to coordinate care of patients, particularly older people who see multiple doctors

• The group thought the biggest barriers to improving health were:
  • People have to want to make a change
  • PE is still in schools, which is good, but more focus on health classes
  • Budgets and resources
  • Support local organizations
• The group listed the following as community assets to support health:

  - Hospital
  - Veterans Affairs
  - Health Department has a lot of programs
  - Schools – teachers, care about children
  - YMCA
    - Silver Sneakers Program
    - Go Pink program at the Y – breast cancer survivors get a 6 month members, nutrition counseling, fitness coach, their own workout class
  - Sense of community – small town with caring people

• When asked where member of the community turn for basic healthcare needs, they responded:

  - Primary care physicians
  - Urgent Care
  - ER
  - Diabetes classes at the Y, but funding is gone
  - Substance abuse access? None, have to go to Cookeville or Nashville, big need
  - The school has counselors through Centerstone, but only take TennCare

  - Senior Center – exercise classes, pot lucks, yoga, screenings, trips, transportation
  - City and county trying to improve facilities, walking bridge to complete the walking trail, the high school track is open, building a skate park downtown
  - White County is a really good place to live, but have to work together and partner
  - BlueCross BlueShield partnership program – health coach, improving health get lower insurance rates

  - Other places don't treat you well if you have TennCare only insurance or cash and very expensive
  - AA here
  - There's some drug and rehab treatment in the jail
  - Half the jail population has a drug or mental health issue
  - To get mental health or substance abuse help, red tape and waiting list and very expensive

Photo credit: Chuck Sutherland, used with permission; Welch Point
• When asked what the community needs to manage health conditions or to stay healthy, the group listed:
  • Dental health – expensive, health department has children’s dentistry. It is an issue for the elderly – vicious cycle, no teeth, can’t eat healthy. Abscessed teeth can create serious health problems. Lack of teeth causes social isolation
  • Support groups needed – caregivers support groups
  • Industry – higher paying jobs with insurance
  • Need people with motivation, initiative and drive
  • Teach kids to be responsible
  • Tough to find employees, pre-employment drug screenings removes many for consideration

• When asked what priority health improvement action should White County focus on, the group listed:
  • Education
  • Community outreach – knowledge of what’s available in the community, screenings, job counseling, place that can help people
  • Desire, incentive based system to make people want to work
  • Attitude of community – really cares
  • Need a Family or Children’s Advocacy Center – other counties have one, Crossville, Cookeville, but not in White County. Central point of help, a place to coordinate help for people – food, clothing, resources, school supplies

**Community Interviews**

Eight community stakeholders representing the broad interests of the community participated in either an in-person interview or an online survey, providing their input into the community’s health.

The participants were asked to select their top health issues from the listed issues. The top issue selected was alcohol and drug prevention/treatment followed by oral-dental health, obesity, mental and emotional health and cancer.

When asked about the top social and economic determinants that contribute to health, the group listed, poverty-working poor, health insurance coverage, unemployment and income-wealth dispersion.

The participants felt the most important natural, social and structural environmental issues that contribute to health were, healthy food access, second hand smoke, transportation. Affordable housing and rural/suburban/urban setting.

When responding to the conditions or diseases that are causing illness and death in your community, the group listed, alcohol and drug abuse/addiction followed by diabetes, diabetes, chronic disease, obesity, cardiovascular disease-hypertension and emotional and mental health.

The participants were asked how, from whom, where care was received and how it was coordinated. Access to care-oral-dental health care, access to care – specialty care, and affordability cost of care were mentioned most.

When asked about the health behaviors, the choices we make that promote health or risk health, the
participants responded, alcohol and drug abuse/addiction, tobacco use/smoking and adherence to medical regimen.

When asked what reasons or barriers exist that cause the use of emergency rooms for non-emergencies, the participants responded:

- Many have a PCP and come with primary care treatable conditions
- Lack of after hour availability by PCPs
- Patients needing psychiatric care
- Lack of insurance
- Not required to pay in advance for services
- Open 24/7
- Don’t want to take time off work
- Think they won't have to pay the bill
- Don’t have money for doctor’s office co-pay
- Lack of PCP
- Long delay to see PCP

When asked about what works well in the county that supports health and well-being, the responses were plentiful.

- Hospital - opportunity to increase awareness of full range of services offered
- Health department
- Church community
- Proximity to Cookeville
- COPD Foundation
- YMCA
- Substance abuse and prevention in early education system
- Diabetes education classes at Payless Pharmacy
- Baby and Me Tobacco Free
- Wellness services through pharmacy
- Good health promotion in school system
- Information distributed through schools about free immunizations, etc.
When asked what health initiatives the county should focus on for the next three years, the participants responded:

- Specialized care to keep patients in Sparta
- Marketing the range of services provided at Highlands
- Fast Track urgent care office to provide free care
- Health literacy and navigation services - collaboration between STH and Health Department
- Added transportation options to resources outside the county
- Alcohol and drug abuse
- Mental health
- Oral healthcare access, dental resources for adults
- Increased awareness of importance of nutrition and active lifestyle
- Drug and alcohol education in schools
- Obesity - education/prevention (nutrition/exercise education)
- Smoking, tobacco-related illnesses
- Exercise
- Drug abuse and diversion
- Uninsured and under-insured patients
- Drug/alcohol abuse and treatment
- Mental health treatment
- Insurance coverage/barriers

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**Health Status Analysis and Comparisons**

Information from County Health Rankings and America’s Health Rankings was analyzed in the Community Health Needs Assessment in addition to the previously reviewed information and other public health data. Other data analyzed was referenced in the bullets below, such as: causes of death, demographics, socioeconomics, consumer health spending, focus group, and interviews. When data was available for Tennessee, the U.S. or the top 10% of counties (90th percentile), they were used as comparisons. Where the data indicated a strength or an opportunity for improvement, it is called out below. Strengths are important because the community can build on those strengths and it’s important to continue focus on strengths so they don’t become opportunities for improvement. The full data analysis can be seen in the CHNA PowerPoint. There were strengths and opportunities identified for measures and for the counties. Opportunities were denoted with red stars, and strengths were denoted using green stars. The years displayed on the County Health Rankings graphs show the year the data was released. The actual years of the data was contained in the source notes below the graphs.
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>223.6</td>
<td>203.1</td>
<td>169.8</td>
</tr>
<tr>
<td>Cancer</td>
<td>217.1</td>
<td>185.0</td>
<td>163.2</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>77.9</td>
<td>52.3</td>
<td>42.1</td>
</tr>
<tr>
<td>Accidents</td>
<td>63.6</td>
<td>52.5</td>
<td>39.4</td>
</tr>
<tr>
<td>Stroke</td>
<td>62.3</td>
<td>44.2</td>
<td>36.2</td>
</tr>
<tr>
<td>Alzheimer's Disease</td>
<td>42.0</td>
<td>37.0</td>
<td>23.5</td>
</tr>
<tr>
<td>Diabetes</td>
<td>46.1</td>
<td>24.4</td>
<td>21.2</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>30.0</td>
<td>21.5</td>
<td>15.9</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>23.6</td>
<td>14.1</td>
<td>13.2</td>
</tr>
<tr>
<td>Suicide</td>
<td>20.3</td>
<td>14.5</td>
<td>12.6</td>
</tr>
<tr>
<td>Liver Disease</td>
<td>7.6</td>
<td>11.5</td>
<td>10.2</td>
</tr>
</tbody>
</table>

- Source: Tennessee Department of Health, National Center for Health Statistics, CDC: 2013 Final Data

Red areas had death rates higher than the state. The major causes of death in White County were heart disease, followed by cancer, chronic lower respiratory disease, accidents, stroke, diabetes, Alzheimer's disease, influenza and pneumonia, kidney disease, suicide and liver disease.
Health Outcomes (Length of Life and Quality of Life)

Health Outcomes are a combination of length of life and quality of life measures. White County ranked 62nd in Health Outcomes out of 95 Tennessee counties. White County ranked 73rd out of 95 Tennessee counties in length of life. Length of life was measured by years of potential life lost per 100,000 population prior to age 75.

In most of the following graphs, White County will be blue, Tennessee red, U.S. green and the 90th percentile gold.

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 5 pounds 8 ounces. White County ranked 43rd out of 95 counties for quality of life.
Quality of Life OPPORTUNITIES

• White County had a slightly higher percentage of the population with poor or fair health (24%) than the U.S. and TN.

• White County had a higher average number of poor physical health days than Tennessee and the U.S. with 4.9 poor physical health days out of the past 30 days.

• White County also had higher average number of poor mental health days than TN and the U.S. with 4.5 poor mental health days out of the past 30 days.

*indicates a change in the Behavioral Risk Factor Surveillance System Survey calculations of results or changes in survey methodologies. 2016 cannot be compared to prior year results.
Health Factors or Determinants

Health factors or determinants were comprised of measures related to health behaviors, clinical care, social & economic factors, and physical environment. White County ranked 46th out of 95 Tennessee counties for health factors.

Health Behaviors

Health behaviors are made up of nine measures. Health behaviors account for 30% of the county rankings. White County ranked 50th out of 95 counties in Tennessee for health behaviors.

Source: Obesity, physical inactivity - County Health Rankings; CDC Diabetes Interactive Atlas, 2012
Source: Access to exercise opportunities - County Health Rankings; ArcGIS Business Analyst, Delorme map data, ESRI and US Census Tigerline Files, 2013
Source: Smoking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS)
Source: Excessive drinking - County Health Rankings; Behavioral Risk Factor Surveillance System (BRFSS), 2014
Source: Alcohol-impaired driving deaths - County Health Rankings; Fatality Analysis Reporting System, 2010-2014
Source: STDs - County Health Rankings; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2013
Source: Teen birth rate – County Health Rankings; National Center for Health Statistics – Natality files, 2007-2013

Reducing Multiple Painkiller Prescribers

Tennessee 36%

2012 Action:
Tennessee required prescribers to check the state’s prescription drug monitoring program before prescribing painkillers.

2013 Result:
Saw a 36% drop in patients who were seeing multiple prescribers to obtain the same drugs, which would put them at higher risk of overdose.

1,263 people, at least, died from opioid overdose in 2014 in Tennessee

For every one person who dies there are 851 people in various stages of misuse, abuse and treatment, according to estimates from the U.S. Centers for Disease Control and Prevention.

There are at least 1,074,813 Tennesseans, or about 1 in 6, misusing or abusing opioids or in treatment, by the CDC’s estimate.

For those who died in 2014 there are:
• 12,630 in treatment admissions for abuse
• 32,838 emergency room visits for misuse or abuse
• 136,404 people who abuse opioids or are dependent
• 925,779 non-medical users

Source: Tennessee Department of Health and U.S. Centers for Disease Control and Prevention

Source(s): TN Dept of Health, CDC (2014); PDMP Center of Excellence at Brandeis University (2014)
Health Behaviors STRENGTHS

- White County experienced lower excessive drinking than TN and the U.S.
- White County had lower sexually transmitted infections measured as chlamydia rate per 100,000 population than TN and the U.S.

Health Behaviors OPPORTUNITIES

- Adult obesity, although slightly lower than Tennessee, was higher than the U.S. Obesity puts people at increased risk of chronic diseases: 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. It often leads to metabolic syndrome and type 2 diabetes. It is a factor in cancers, such as ovarian, endometrial, postmenopausal breast cancer, colorectal, prostate, and others.
- Physical inactivity was higher in White County than TN and the U.S.
- The percentage of the population with adequate access to locations for physical activity was lower in White County than TN and the U.S.
- Adult smoking in White County, was higher than TN and the U.S. Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes.
- The percentage of driving deaths with alcohol involved was higher than TN and the U.S.
- The teen birth rate in White County was higher than TN and the U.S. at 53.3 births per 1,000 females age 15-19.
- The drug overdose mortality rate, although lower than TN, was higher than the U.S. and increasing.
- One in six Tennesseans was estimated to be abusing opioids.
Clinical Care

Clinical care ranking is made up of eight indicators, and they account for 20% of the county rankings. White ranked 50th out of 95 Tennessee counties in clinical care.

Source: Uninsured - County Health Rankings; Small Area Health Insurance Estimates, 2013

Source: Preventable hospital stays, mammography screening, diabetic screening - County Health Rankings; Dartmouth Atlas of Health Care, 2013
Source: Pop to PCP - County Health Rankings; Area Health Resource File/American Medical Association, 2013
Source: Pop to Dentists - County Health Rankings; Area Health Resource File/National Provider Identification file, 2014
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, 2014
Source: County Health Rankings; CDC Diabetes Interactive Atlas, 2013

Clinical Care OPPORTUNITIES

• Percent uninsured was similar to TN and higher than the U.S.
• The percent of diabetic Medicare enrollees receiving diabetic screening was lower than TN and similar to the U.S.
• The population per primary care physician was higher than TN and the U.S.
• The population per dentist was higher in White than TN and the U.S.
• The population per mental health provider was higher than TN and the U.S.
• 44.9% of the population of the Upper Cumberland was at risk due to lack of dental care.
• The population per mental health provider was higher in White than TN and the U.S.
• The percent of adults 20 and above with diabetes was slightly higher than TN.
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. White County ranked 51st out of 95 Tennessee counties in social and economic factors.

Source: High School graduation – County Health Rankings; States to the Federal Government via EDFACTS, 2012-2013
Source: Some college - County Health Rankings; American Community Survey, 5-year estimates, 2010-2014
Source: Children in poverty - County Health Rankings; US Census, Small Area Income and Poverty Estimates, 2014
Source: Social associations - County Health Rankings; County Business Patterns, 2013

Source: Income Inequality - County Health Rankings; Social Statistics and Information, 2013
Source: Children in single-parent households - County Health Rankings; Poverty, 2014
Source: Injury deaths - County Health Rankings; Vital Statistics, 2014
Source: Violent crime rate - County Health Rankings; Crime, 2014
Unemployment Rate by County

Source: Bureau of Labor Statistics

**Social & Economic Factors STRENGTHS**

- High school graduation was higher in White County (93%) than TN and the U.S.
- The percentage of children in single-parent households was lower in White County, 23%, than TN and the U.S.
- Income inequality as measured by the ratio of household income at the 80th percentile to income at the 20th percentile was equal to TN and lower than the U.S.
- Violent crime rate per 100,000 population was lower in White County than in TN and the U.S.
Social & Economic OPPORTUNITIES

• The percent of adults with some college was lower than TN and the U.S.

• The percentage of children in poverty was higher in White County than Tennessee and the U.S.; 30% of White County children lived in poverty.

• Social associations were lower in White County than TN and the U.S. 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. Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality.

• Injury deaths are higher than TN and the U.S.

• Lower median household income than TN and the U.S.

• Higher poverty than TN and the U.S.

Photo credit: Chuck Sutherland
Physical Environment

Physical environment contains five measures in the category. Physical environment accounts for 10% of the county rankings. White ranked 38th out of 95 Tennessee counties in physical environment.

**Drinking water violations** (% of pop exposed to water exceeding a violation limit during the past year)

There were no drinking water violations in 2016

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

**Driving alone to work**

**Long commute: driving alone** (among workers who commute alone, the % that commute > 30 minutes)

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*Source: Drinking water violations – County Health Rankings; EPA, FY 2013-2014*

*Source: Severe housing problems – County Health Rankings; HUD Comprehensive Housing Affordability Strategy data, 2008-2012*

*Source: Driving alone to work and long commute – County Health Rankings: American Community Survey, 5-year estimates, 2010-2013*

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**Air pollution - particulate matter** (avg daily measure of matter in micrograms per cubic meter)

*Source: Air pollution – County Health Rankings: CDC WONDER environmental data, 2010, Hamilton County Health Data Profile; CDC, TN Department of Health.*
Physical Environment STRENGTHS

- There were no drinking water violations in White County. These statistics are prior to the Flint water crisis.
- There was a lower percentage of households with at least one of four housing problems, overcrowding, high housing costs, lack of kitchen or plumbing facilities than TN and the U.S.

The transportation choices that communities and individuals make have important impacts on health through active living, air quality, and traffic crashes. The choices for commuting to work can include walking, biking, taking public transit, or carpooling, the most damaging to the health of communities is individuals commuting alone. In most counties, this is the primary form of transportation to work. Source: County Health Rankings

There were Four Broad Themes that Emerged in this Process:

- White County needs to create a “Culture of Health” which permeates throughout the cities, employers, churches, and community organizations to engender total 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 had the poorest health outcomes.
- While any given measure may show an overall good picture of community health, there are significantly challenged subgroups.
- It will take a partnership with a wide range of organizations and citizens pooling resources to meaningfully impact the health of the community. Many assets exist in the county to improve health.
## Results of the CHNA

### Prioritization of Health Needs

At the Community Health Summit, the attendees identified and prioritized the most significant health needs in the community for the next three-year period. The group used the criteria below to prioritize the health needs.

<table>
<thead>
<tr>
<th>Prioritization Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Magnitude / scale of the problem</strong></td>
<td>The health need affects a large number of people within the community.</td>
</tr>
<tr>
<td><strong>Severity of the problem</strong></td>
<td>The health need has serious consequences (morbidity, mortality, and/or economic burden) for those affected.</td>
</tr>
<tr>
<td><strong>Health disparities</strong></td>
<td>The health need disproportionately impacts the health status of one or more vulnerable population groups.</td>
</tr>
<tr>
<td><strong>Community assets</strong></td>
<td>The community can make a meaningful contribution to addressing the health need because of its relevant expertise and/or assets as a community and because of an organizational commitment to addressing the need.</td>
</tr>
<tr>
<td><strong>Ability to leverage</strong></td>
<td>Opportunity to collaborate with existing community partnerships working to address the health need, or to build on current programs, emerging opportunities, or other community assets.</td>
</tr>
</tbody>
</table>
The following issues were prioritized and goals and actions were brainstormed by the table groups at the Community Health Summit and formed the foundation of White County’s health initiatives. 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 the actual comments received on the sticky notes.

1. **Substance Abuse & Mental Health (19)**
   - Alcohol / Drugs
   - Chronic Substance Abuse
   - Drug Abuse
   - Drug abuse including Alcohol
   - Drug and Alcohol abuse
   - Drugs
   - Parents drug abuse
   - Prevention of Substance abuse
   - Smoking
   - Substance Abuse
   - Tobacco Use

2. **Obesity (13)**
   - Obesity
   - Obesity/Diabetes
   - Nutrition
   - Nutrition for Children (lack of food and improper diet)
   - Obesity/Diabetes
   - Over Weight
   - Obesity and associated comorbidities

3. **Access (13)**
   - Access to Behavioral Health/ Drug Treatment
   - Access to primary care
   - Access/ Amount of primary care providers
   - Children’s transportation to healthcare
   - Education on disease processes e.g. Diabetes and Alzheimer’s
   - Healthcare for the uninsured and low income

4. **Mental Health (10)**
   - Affordable Assisted Care for Dementia/ Mental Health
   - Depression
   - Mental Health
   - Mental Health Education & Treatment Options
   - Mental Health Providers
   - Mental Health for Adults

5. **Others (3)**
   - Lack of Access to Specialists
   - Lack of healthcare (especially Mental health)
   - More Education and resources for heart disease
   - More resources for Alzheimer’s and dementia patients and family
   - Program to check on seniors
   - Quality Healthcare for children
   - The uninsured population
   - Heart disease
   - Poverty
   - Basic Needs (electricity / water) agencies to address issues
Community Health Summit Brainstorming

Focus Areas, Goals

Substance Abuse

Goal 1 - Reduce the excessive alcohol, tobacco and drug use

Action 1 – Raise awareness in the community of the need for substance abuse programs.
Action 2 – Get business and industry to communicate about these issues with employees.

Resources Needed:
- Community participation
- Establish groups such as Drug Abuse Coalition for White County

Goal 2 - Provide Education

Action 1 – Provide community education programs (e.g. D.A.R.E., child-peer program)
Action 2 – Ensure the community resources are being put to use in the right places

Resources Needed:
- Grants/funding
- Accountability

Goal 3 - Increase recovery resources

Action 1 – Provide community support programs (e.g. smoking cessation program)

Resources Needed:
- Grants/funding
- Accountability
**Obesity**

**Goal 1 - Educate parents and children**

Action 1 – Media campaign
Action 2 – Garden in school/garden club

*Resources Needed:*
  - Volunteer Clubs/Businesses
  - Newspaper/Magazine outreach
  - Radio spots

**Goal 2 - Increase physical activity and educate workplaces**

Action 1 – Implement physical activity breaks
Action 2 – Implement employee incentives for healthy lifestyles

*Resources Needed:*
  - Employers involvement and commitment

**Goal 3 - Improve nutrition**

Action 1 – Reinforce “Green Market” to happen more frequently
Action 2 – Increase exposure to fruits and vegetables to children
Action 3 – Increase club involvement such as 4-H

*Resources Needed:*
  - Gardeners
  - Community participation

**Increase Access**

**Goal 1 – Increase the volume of primary care available**

Action 1 – Facility recruitment
Action 2 – Improve process of finding the doctors that are available

*Resources Needed:*
  - Saint Thomas health professional recruitment
Goal 2 – Utilize opportunity to increase outreach of healthcare & education
Action 1 – Medical missions in White County
Action 2 – Improve education in schools and include parents and grandparents

Resources Needed:
- Community providers and Saint Thomas Highlands employees
- Access to schools
- Partnership with educators

Goal 3 – Provide additional options for transportation to healthcare or satellite locations of providers in rural parts of the county
Action 1 – Provide health fairs at workplaces
Action 2 – Outreach in community centers and churches
Action 3 – Church involvement for transportation

Resources Needed:
- Networking with industries and businesses
- Communication with churches
- Volunteer drivers

Mental Health

Goal 1 - Access to psychiatrists and therapists
Action 1 – Find willing psychiatrist or therapist to see patients in the county
Action 2 – Find a facility willing to partner with psychiatrist/therapist

Resources Needed:
- Funding
- Provider availability
- Transportation
- Facility/location

Goal 2 – Peer counseling/support ministry/education
Action 1 – Peer Counseling training
Action 2 – Establish mental health coalition

Resources Needed:
- Funding for training and materials
- Volunteers
- Unified efforts

Goal 3 – Affordable living
Action 1 – Educating community about need
Action 2 – Trust Worthy over-seers/staff
Resources Needed:

- Funding
- Homes
- Choices
- Education

Community Assets and Resources

Community Asset Inventory

A separate document that includes 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 and interviews also identified community resources to improve health, which are listed on pages 17 and 19 above.
Community Health Needs Assessment

completed by Saint Thomas Highlands Hospital and Saint Thomas Health in partnership with:

Stratasan