Community Health Needs Assessment

2018 Action Plan

Community Collaboration is Key

INCLUDED IN THE STUDY

Clay | Cumberland | Fentress | Jackson | Overton | Pickett | Putnam | White
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Framework

Understanding the community’s health needs is an important component to CRMC’s mission of “Building Healthier Communities.” CRMC sought assistance from DHG Healthcare, ranked as the ninth largest privately-held healthcare consulting firm by Modern Healthcare to conduct a community needs assessment. The process included:

- **Review of secondary data**
  - Healthy People 2020 (the nation’s 10-year goals and objectives for health promotion and disease prevention developed by the U.S. Department of Health and Human Services)
  - Demographics
  - County Health Rankings and Roadmaps (collaboration between Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute)

- **Upper Cumberland focus groups**
  - Public health leaders
  - Physicians
  - EMS directors
  - Business Leaders
  - Religious leaders
  - Former patients
  - Community advocacy groups
  - Community members

**What do we do with the results? COMMUNITY COLLABORATION IS KEY**

CRMC does not have adequate resources to solve all the problems identified. Some issues are beyond the mission of the hospital, and action is best suited for a response by others. Some improvements will require personal actions by individuals rather than an organization. This report provides a foundation of information for how CRMC, along with other organizations and agencies, can collaborate to bring the best each has to offer to address the more pressing identified community needs.
Demographics
2018-2023 Growth 65+

Putnam and Cumberland County Net Growth 65+ accounts for 60% of the growth across the area.

FINDINGS:

- The 65+ population is a growing sector across the entire service area.
- Putnam and Cumberland make up approximately 60% of service area.
- 75% of net population growth will be in Cumberland and Putnam.
- 50% of children (0-17) across the area are in Putnam and Cumberland.
- 60% of females (18-44) are in Putnam and Cumberland.
- 61% of 65+ are in Putnam and Cumberland.

Source: Nielsen, 2018-2023

<table>
<thead>
<tr>
<th>County</th>
<th>% Growth 65+ 2018-2023</th>
<th>Net Growth 65+ 2018-2023</th>
<th>% of Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putnam County - TN</td>
<td>14.53%</td>
<td>1,940</td>
<td>28.2%</td>
</tr>
<tr>
<td>Clay County - TN</td>
<td>10.51%</td>
<td>207</td>
<td>3.0%</td>
</tr>
<tr>
<td>Cumberland County - TN</td>
<td>12.25%</td>
<td>2,219</td>
<td>32.3%</td>
</tr>
<tr>
<td>Fentress County - TN</td>
<td>14.34%</td>
<td>566</td>
<td>8.2%</td>
</tr>
<tr>
<td>Jackson County - TN</td>
<td>14.04%</td>
<td>368</td>
<td>5.4%</td>
</tr>
<tr>
<td>Overton County - TN</td>
<td>12.86%</td>
<td>599</td>
<td>8.7%</td>
</tr>
<tr>
<td>Pickett County - TN</td>
<td>12.99%</td>
<td>181</td>
<td>2.6%</td>
</tr>
<tr>
<td>White County - TN</td>
<td>14.33%</td>
<td>796</td>
<td>11.6%</td>
</tr>
<tr>
<td>Combined</td>
<td>13.34%</td>
<td>6,876</td>
<td>100.0%</td>
</tr>
<tr>
<td>State of TN</td>
<td>17.99%</td>
<td>199,500</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Nielsen, 2018-2023
Access to Health Services

GOAL: Improve access to comprehensive, quality health care services

ACTION PLAN

- Consider recruitment of primary care providers in Putnam County and evaluate need for outlying communities on an "as needed" basis.
- Enroll qualified individuals into TennCare when they are in the hospital.
- Develop a public service campaign during open enrollment period this fall to help increase the number of uninsured under 65.
- Plan for future ED expansion and consider expansion of Urgent Care model to key markets

FINDINGS:

- Average uninsured rate for our service area for residents under 65 is 13.18% compared to state average of 12.0%.
- All counties need to reduce the percent of uninsured.
- All counties lack sufficient primary care physicians.
  - Putnam and Cumberland are within 100 people of state average.
- ER visits in 2022 are projected to increase by 3.0% overall.
  - Cumberland is expected to have the largest increase at 4.0%.
- Urgent care visits in 2022 are anticipated to increase overall by 2.4%
  - Cumberland is expected to increase by 3.8%.

Health Insurance Coverage Status
Under 65 | All Races | Both Sexes | All Incomes

No County meets the 2020 target of 100%

Healthy People 2020 Target:
100% persons with medical insurance

Data Source: 2017 U.S. Census Bureau, Small Area Health Insurance Estimates – Data as of 2015
Clinical Preventive Services

GOAL: Increase number of people who take advantage of and have access to clinical preventive services

**FINDINGS:**

**DIABETES**
Prevalence in adults in all counties (except Putnam) is higher than state average.

Most counties have higher percent of Medicare beneficiaries with diabetes than TN state and national average.

- 75% of the counties meet or exceed TN average for Medicare beneficiaries receiving HbA1c screenings.

**HYPERTENSION**
All counties (except Overton, Putnam and Pickett) meet or exceed TN state average for Medicare beneficiaries with hypertension.

- Putnam and White lead with highest rate of hypertension death in the 65+ age group.

**HEART FAILURE**
All counties exceed the TN state and national average year over year for percent of Medicare beneficiaries with heart failure.

- All counties (except Cumberland and Pickett) exceed the state and national average for heart disease death rate in the 65+ age group.

**CANCER**
Cancer incident rates are highest in Fentress and White counties.

- None of the counties meet the Healthy People 2020 target for cancer death rates (Fentress, White and Overton have the highest rates).

**BREAST CANCER**
Highest breast cancer incidence rates are in Fentress and White counties with White having the highest breast cancer death rate (Fentress didn’t report this metric); both counties did not meet or exceed the TN state average for percent of Medicare patients ages 67-69 receiving mammography screening.

**COLONOSCOPY/SIGMOIDOSCOPY**
The average percent of adults 50+ having had these screenings is 16.3% less than the TN state average.

- Colon cancer incidence rates are highest in Fentress, Pickett, and Overton counties compared to the other counties.
- Jackson has a high death rate for colon cancer while Fentress and Cumberland meet the Healthy People 2020 target.
# Cancer Death Rates per 100,000 Population

Bolded text indicates meeting or beating the Healthy People 2020 target.

<table>
<thead>
<tr>
<th>CANCER TYPE</th>
<th>HEALTHY PEOPLE 2020 TARGET</th>
<th>PUTNAM</th>
<th>CLAY</th>
<th>CUMBERLAND</th>
<th>FENTRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sites</td>
<td>161.4/100,000</td>
<td>192.9/100,000</td>
<td>203.1/100,000</td>
<td>179.1/100,000</td>
<td>212.8/100,000</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>20.7/100,000 Female</td>
<td>16.8/100,000</td>
<td>-</td>
<td>20.9/100,000</td>
<td>-</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>14.5/100,000</td>
<td>16.3/100,000</td>
<td>-</td>
<td>14.4/100,000</td>
<td>14.1/100,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CANCER TYPE</th>
<th>HEALTHY PEOPLE 2020 TARGET</th>
<th>JACKSON</th>
<th>OVERTON</th>
<th>PICKET</th>
<th>WHITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sites</td>
<td>161.4/100,000</td>
<td>183.2/100,000</td>
<td>212.2/100,000</td>
<td>162/100,000</td>
<td>205/100,000</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>20.7/100,000 Female</td>
<td>-</td>
<td>21.6/100,000</td>
<td>-</td>
<td>29.4/100,000</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>14.5/100,000</td>
<td>25.8/100,000</td>
<td>15.4/100,000</td>
<td>-</td>
<td>179/100,000</td>
</tr>
</tbody>
</table>

Source: Tennessee Cancer Profiles (Timeframe: 2010-2014)

## ACTION PLAN

- Continue partnership with Putnam County Health Department to provide in-kind imaging services through its primary care clinic
- Share these results with health providers in the region.
- Continue to provide services through the Diabetes Center and promotion of iCube/CRMC diabetes app
- Continue growth of Endocrinology practice considering the addition of another Endocrinologist in the future
- Work collaboratively with Cardiologists to develop comprehensive Heart Failure clinics and protocols.
- Continue providing important health screenings/health fairs at a free or affordable price (blood work, lung screenings, Pink Ribbon of Hope mammograms, etc.)
- Increase emphasis on: diabetes education, high blood pressure education
- Promote and increase lung cancer screenings
- Consider a public service campaign on colonoscopy screenings next summer with addition of two new gastroenterologists, especially in Fentress, Picket and Overton; share info with the CRMC Cancer Committee to determine other screening opportunities
- Address these health concerns in *Seasons* magazine targeting ages 50+
Maternal, Infant Child Health

GOAL: Improve the health and well-being of women, infants, children and families

FINDINGS:

- Overall, the targeted counties saw a decrease in rate of teen (ages 15-19) births by at least 3 points from 2015 to 2017.
- Cumberland had the highest rate.
- Putnam had the lowest rate.
- 75% of the counties meet or exceed TN's average child mortality rate.
- All counties meet or outperform the state average for percent of live births with low birth weight.

RATES OF BIRTHS TO MOTHERS AGE 15-17

ACTION PLAN

Share information with health departments, especially Cumberland County.

See the action plan on page 13 regarding opioid usage in the region.
**Mental Health**

**GOAL:** Improve mental health through prevention and by ensuring access to appropriate, quality mental health services

**FINDINGS:**

- All counties exceed the state average of "poor mental health days"* by 0.2 days. Jackson reported the highest number of days.
- All counties report at least 2% more Medicare beneficiaries struggling with depression than the state average. (TN is 4% lower than the national average.)
- Putnam’s rate of mental health providers is better than the state average; however, the other counties either do not report any mental health providers or are at least 4.5 times less than the state average.

**MAP OF POOR MENTAL HEALTH DAYS**

*This measure is based on survey responses to the question: “Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”*
Nutritional, Physical Activity and Obesity

GOAL: Promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of health body weights

FINDINGS:
- 38% of the counties meet or outperform the state average for percent of adults who are obese.
  - Cumberland at 29% is the only county to meet the Healthy People 2020 Target of 30.5% adults obese.
  - Fentress has the highest number of obese adults at 36% with Jackson close behind at 35%.
- All counties except for Putnam have a better food environment index than the state average.
- All counties except for Putnam outperform the state average of percent of low income population with limited access to health food.
- Exercise – Fentress and Putnam are the only counties that report a lower percentage than state average of percent of adults reporting no leisure time physical activity. Individuals in Clay and Pickett report having very little access to exercise opportunities.

Oral Health

GOALS:
- Prevent and control oral and craniofacial diseases, conditions and injuries
- Improve access to preventive services and dental care

FINDINGS:
All counties except Putnam lack enough dentists. Fentress is 4.6 times below the state average.

Reproduction and Sexual Health

GOALS:
- Promote healthy sexual behaviors
- Strengthen community capacity
- Increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications

FINDINGS:
- All counties have lower rates of chlamydia that state average.
- All counties fall below the state average for HIV prevalence despite an overall increase from 2015 to 2017.

ACTION PLAN
- Promote healthy sexual behaviors
- Strengthen community capacity
- Increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications

ACTION PLAN
- Share findings with health departments, school systems and primary care providers.
Social Determinants

**GOAL:** Create social and physical environments that promote good health for all

**FINDINGS:**

**CHILD ABUSE AND NEGLECT**
All counties exceed the state average rate of founded investigations for child abuse and neglect.
- Clay’s rate is 3.3 times higher than the state average and 2.2 times the average rate of the other seven counties.

**MEDIAN HH INCOME**
All counties fall below the state average for median household income.
- All counties except Cumberland have a higher percentage of families below poverty level compared to state average.

**UNEMPLOYMENT**
Unemployment rates have decreased from 2015 to 2017; however, all counties report a higher percentage of unemployment than the state average.
- Clay is the highest with 9%.

**EDUCATION**
All counties have a higher percentage of adults with some education above 9th grade than the state and national average.
- All counties except Putnam have a higher percentage of adults with no high school diploma compared to state and national average.

**POVERTY**
All counties have reduced the percentage of children in poverty from 2015 to 2017; however, all counties except Putnam underperform compared to the state average.

| Rate and Total Number of Founded Investigations for Child Abuse and Neglect |
|---|---|---|---|---|
| County | Data Type | 2014 | 2015 | 2016 |
| Clay | Number | 12 | 27 | 23 |
| Cumberland | Number | 130 | 104 | 67 |
| Fentress | Number | 41 | 25 | 26 |
| Jackson | Number | 15 | 22 | 12 |
| Overton | Number | 39 | 45 | 36 |
| Pickett | Number | 5 | 7 | 7 |
| Putnam | Number | 101 | 136 | 119 |
| White | Number | 70 | 46 | 37 |
| Tennessee | Number | 8,058 | 8,730 | 6,884 |
Environmental Quality

GOAL: Promote health for all through a healthy environment

FINDINGS:

Review of Air Quality and Housing
- All counties except for Putnam have fewer households with at least one housing problem than the state average with the exception of Putnam. Putnam exceeds the state average by 3%.
  Main issue –
    Rent is higher than 50% of monthly income
- All counties have better air quality than the TN state average.

ACTION PLAN
Share housing issue with community leaders in Putnam.

Injury and Violence

GOAL: Prevent unintentional injuries and violence, and reduce their consequences

FINDINGS:

- All counties except for Putnam exceed state average for motor vehicle deaths.
- All counties are significantly outperforming the state average for violent crime rate. Pickett is ranked in the U.S. top 10th percentile in 2015 and 2017.

ACTION PLAN
- Share information about motor vehicle deaths with community leaders, schools, Power of Putnam, law enforcement and health departments.
- Support educational efforts such as Mock DUs held by first responders at area schools each year.
- Share information about violent crime rate with community and law enforcement leaders.
Substance Abuse / Tobacco

GOALS:
- Reduce substance abuse to protect the health, safety and quality of life for all, especially children
- Reduce illness, disability and death related to tobacco use and secondhand smoke exposure

FINDINGS:

SMOKING
Pickett and Cumberland’s percent of smoking adults is lower than the state average while Overton meets the state average. All other counties are higher than the state average of 22%.

OPIOIDS
TN has ranked 3rd for worst opioid prescribing rates. Six of our counties exceed the TN state average.

ALCOHOL USE
All counties are in the U.S. top 10th percentile for percentage of excessive drinking and meet/exceed the state average except for Overton and Putnam.

Most counties have a higher percentage of driving deaths with alcohol impairment than the state average.

Pickett experienced more than double the state average in 2017.

DRUG OVERDOSES
All counties except for Overton have seen an increase in drug overdose mortality rates.

ACTION PLAN
- Have implemented new opioid prescribing protocols within the hospital in accordance with the TN Together Opioid Law
- Continue education with health providers about pain control options
- Share findings with Power of Putnam, health departments, schools and community leaders.

PERCENTAGE OF ADULTS SMOKING

<table>
<thead>
<tr>
<th>County</th>
<th>% Adults Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putnam County - TN</td>
<td>23%</td>
</tr>
<tr>
<td>Clay County - TN</td>
<td>23%</td>
</tr>
<tr>
<td>Cumberland County - TN</td>
<td>20%</td>
</tr>
<tr>
<td>Fentress County - TN</td>
<td>24%</td>
</tr>
<tr>
<td>Jackson County - TN</td>
<td>25%</td>
</tr>
<tr>
<td>Overton County - TN</td>
<td>22%</td>
</tr>
<tr>
<td>Pickett County - TN</td>
<td>20%</td>
</tr>
<tr>
<td>White County - TN</td>
<td>23%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>22%</td>
</tr>
<tr>
<td>Top U.S. Performers</td>
<td>14% (10th Percentile)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County</th>
<th>Opioid Prescribing Rate/100 persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putnam County - TN</td>
<td>139</td>
</tr>
<tr>
<td>Clay County - TN</td>
<td>189.9</td>
</tr>
<tr>
<td>Cumberland County - TN</td>
<td>129.3</td>
</tr>
<tr>
<td>Fentress County - TN</td>
<td>178.7</td>
</tr>
<tr>
<td>Jackson County - TN</td>
<td>63.3</td>
</tr>
<tr>
<td>Overton County - TN</td>
<td>111.5</td>
</tr>
<tr>
<td>Pickett County - TN</td>
<td>85.8</td>
</tr>
<tr>
<td>White County - TN</td>
<td>130.7</td>
</tr>
<tr>
<td>Tennessee</td>
<td>107.5</td>
</tr>
</tbody>
</table>

FINDINGS:

Maps reflect County levels of retail opioid prescriptions dispensed per 100 persons.
Overall County Health Ranking: Health Outcomes

The overall rankings in health outcomes represent how healthy counties are within the state. The healthiest county in the state is ranked #1. The ranks are based on two types of measures: how long people live and how healthy people feel while alive.

<table>
<thead>
<tr>
<th>Health Outcomes 2017</th>
<th>Health Outcomes 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putnam County - TN</td>
<td>22</td>
</tr>
<tr>
<td>Clay County - TN</td>
<td>72</td>
</tr>
<tr>
<td>Cumberland County - TN</td>
<td>50</td>
</tr>
<tr>
<td>Fentress County - TN</td>
<td>78</td>
</tr>
<tr>
<td>Jackson County - TN</td>
<td>82</td>
</tr>
<tr>
<td>Overton County - TN</td>
<td>61</td>
</tr>
<tr>
<td>Pickett County - TN</td>
<td>15</td>
</tr>
<tr>
<td>White County - TN</td>
<td>66</td>
</tr>
</tbody>
</table>

Fentress and Clay county were the only counties to improve their Overall Health Outcomes Rankings.

Overall County Health Ranking: Health Factors

The overall rankings in health factors represent what influences the health of a county. They are an estimate of the future health of counties as compared to other counties within a state. The ranks are based on four types of measures: health behaviors, clinical care, social and economic, and physical environment factors.

<table>
<thead>
<tr>
<th>Health Factors 2017</th>
<th>Health Factors 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putnam County - TN</td>
<td>29</td>
</tr>
<tr>
<td>Clay County - TN</td>
<td>81</td>
</tr>
<tr>
<td>Cumberland County - TN</td>
<td>18</td>
</tr>
<tr>
<td>Fentress County - TN</td>
<td>84</td>
</tr>
<tr>
<td>Jackson County - TN</td>
<td>87</td>
</tr>
<tr>
<td>Overton County - TN</td>
<td>39</td>
</tr>
<tr>
<td>Pickett County - TN</td>
<td>47</td>
</tr>
<tr>
<td>White County - TN</td>
<td>34</td>
</tr>
</tbody>
</table>

Pickett and White county made the most significant positive change in overall Health Factors ranking.
Focus Groups

The last and most important element of the Community Needs Assessment is community input. The Community Needs Assessment Team entered into dialogue with key hospital administrators, physicians, key community members, those with knowledge/expertise in public health, and those serving underserved and chronic disease populations.

During this phase, the team conducted focus groups and surveys to gain this knowledge.

The list below includes respondents who participated in this phase.

- Cookeville Regional Medical Center
- CRMC Board of Trustees
- CRMC Physicians
- Putnam and Cumberland County Health Departments
- Highlands Board
- City of Cookeville City Council
- Community Representatives and Patients
- Putnam, White, and Cumberland County EMS Services
- Crossville City Leaders
- Cumberland County Leaders
- Fairfield Glade Board of Directors

**Community Input Findings:**

Each person participating ranked the current health of the community on a scale of 1 to 10, 10 being the best. The score after averaging all participants was 5.7.

**Health Services Lacking in The Community**

(focus group feedback)

<table>
<thead>
<tr>
<th>Addiction Services</th>
<th>Pediatrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergist/Asthma</td>
<td>Podiatry</td>
</tr>
<tr>
<td>Dermatology</td>
<td>Primary Care</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>High Risk Obstetrics</td>
<td>Rheumatology</td>
</tr>
<tr>
<td>Mental Health Services</td>
<td>Trauma</td>
</tr>
<tr>
<td>Neurology</td>
<td>Trauma Pediatrics</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>Urology Female Focused</td>
</tr>
<tr>
<td>Pediatric Specialties - All</td>
<td>Urology Pediatrics</td>
</tr>
</tbody>
</table>

**Barriers to Good Health**

- Lack of proper health education – more information needed on preventable/manageable diagnoses
- Opportunity for health education at a younger age (possibly via school system) – break generational bad habits
- Financial constraints
- Inability to afford health insurance and knowledge of how to obtain health insurance
- Aging population with lack of support (loneliness and navigating alone)
- Difficulty navigating the complexities of healthcare both with making appointments and finances
- Lack of transportation opportunities for elderly and underserved population
- Poor communication concerning resources available for underserved populations
- Directory of services would be helpful to connect the dots
- Mindsets and family lifestyle - generational
- Underutilization of preventive care
- Lack of exercise opportunities in rural areas

**Concerns around Access**

- Long wait times for primary care and select specialties
- Need more specialty care options closer to home
- Lack of transportation for elderly patients
- Overutilization of urgent care and emergency department
- EMS overburdened with non-urgent calls related to lack of transportation or access to care needed
- Knowing how to navigate the system and what services are available
- Limited resources for end of life care