

Maury Regional Medical Center

WAYNE COUNTY REPORT- SEPTEMBER 2019

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Executive Summary

Introduction

Maury Regional Medical Center (MRMC) is pleased to present the 2019 Community Health Needs Assessment. The counties selected for this assessment are: Maury, Marshall, Wayne and Lewis.

The goal of this assessment was to identify the health needs of the above-mentioned counties and work on partnering with the county health councils to develop an action plan to address the prioritized needs. Several health disparities, unmet needs of the community, gaps in addressing the health needs of vulnerable populations and in provision of services have been identified.

Summary of Findings

Based on the primary data gathered from interviewing the stakeholders in the community and secondary data gathered from public domain, the following findings are drawn:

Leading indicators of health: (secondary data)

Tennessee Vital Signs
Youth Obesity
Physical Activity
Youth Nicotine Use
Drug Overdose
Infant Mortality
Teen Pregnancy
Community Water Fluoridation
Frequent Mental Distress
3rd Grade Reading Level
Preventable Hospitalizations
Per Capita Personal Income
Access to Parks and Greenways

Source: Tennessee Vital Signs, 2019

The Department selected these 12 metrics based on extensive public engagement. These metrics are a result of the data available and the projected meaningful outcomes, which taken together collectively assess the state’s health and prosperity. These are areas of opportunities and provide a basis for improving the health of the population.

The big four for Tennessee are a reason for at least six out of ten leading causes of death. These are:

1. Smoking
2. Obesity
3. Physical inactivity
4. Substance abuse

Source: Tennessee Department of Health: State Health Plan; 2018

Top concerns in Wayne County: (primary data from 4 key informants)

Opioid crisis (3)	Transportation (2)
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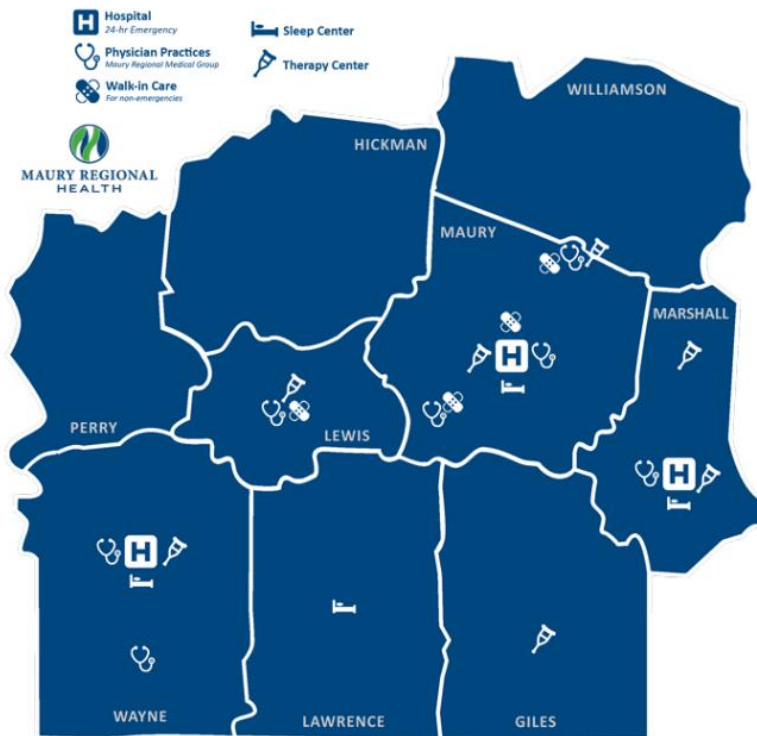
These top concerns were identified based on the key informant interviews, where fourteen stakeholders were specifically asked to mention their opinion of the top 3 problems of Wayne county. This list emerged based on the most frequently mentioned problems.

1. Background

This report is an overview of the health needs in the Wayne Medical Center service area. It helps in better understanding of the health needs thereby guiding the hospital to address prioritized needs.

Definition of Community

The counties selected from Maury's service area for the Community Needs Assessment 2019 are: Maury, Marshall, Wayne and Lewis.



Priority areas from previous CHNA: CHNA 2016

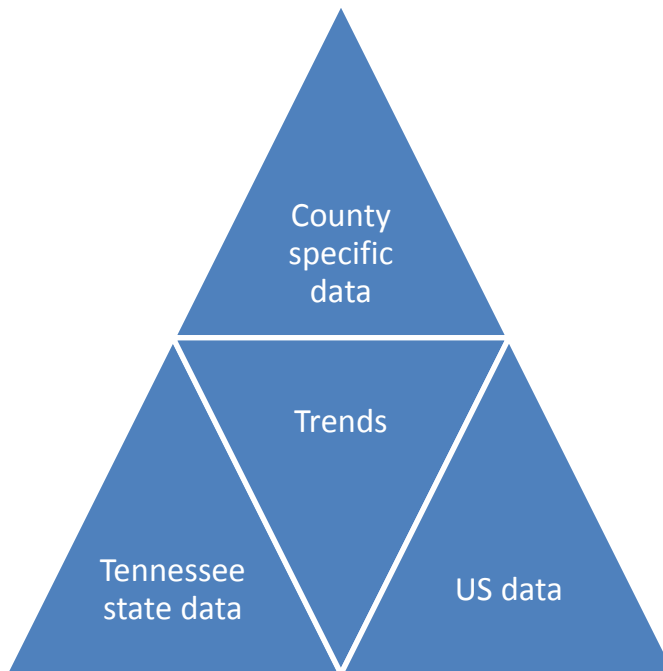
1. Exercise, Nutrition, & Weight
2. Mental Health
3. Substance Abuse
4. Access to Health Services

These issues were prioritized based on voting by the population health department and key staff in the hospital at Maury Regional Medical Center.

2. Methods: (Sources for 2019 CHNA)

Secondary data collection

The secondary data source was collected using 8 publicly available sources. This data comprised of the following:



The secondary data was used to draw comparisons between the performance of Tennessee counties and then compared with the state level and national level data.

Refer Appendix A for the list of secondary data sources used.

Primary data collection

The primary data was gathered by interviewing four key informants from the community. An interview questionnaire comprising of twelve questions as a template and a mandatory activity was used to gather the data. These key partners are:

Table 1: Wayne County Key Informants

KEY INFORMANTS
HEALTH DEPARTMENT
JOINT ECONOMIC & COMMUNITY DEVELOPMENT BOARD
MEDICAL CENTER

The key informants belong to various government public health departments, are members of medically underserved, low-income or minority population.

Refer Appendix B for the detailed list of primary data sources and scoring methodology for the questionnaire and activity.

Identified Health Issues

Top 3 issues: (according to primary data- 4 KI)

1. Transportation (2)
2. Opioid crisis (2)

The four key informants during their interviews were asked to cite the top three issues of the county and above mentioned were the answers that were most frequent.

Forced ranking:

The forced ranking was done as an activity-based exercise during the key informant interviews. The sum of the ranking scores was used as a metric to determine the number one priority and the least value has been considered as top priority. This led to the following priority areas:

Uninsured rate
Opioid crisis
Exercise, nutrition & weight

Data considerations

The primary data that was gathered had certain limitations. Efforts were made to select the key informants from all possible relevant sectors of the community. Based on their availability during the assessment period, four of the informants took part.

3. Secondary data findings

Summary of care offered at Wayne Medical Center

Wayne Medical Center (WMC) has been offering quality care to the residents of Waynesboro, Collinwood, Clifton, and the surrounding area for over 50 years. The hospital has approximately 180 employees and is licensed for 80 beds. It is accredited by The Joint Commission. The services available at WMC include:

- Billing Information
- Diagnostic Imaging
- Emergency Department
- Emergency Medical Services
- Endoscopy
- Infusion Therapy
- Laboratory Services
- Physical Therapy
- Physician Specialist Clinic
- Respiratory Care Services
- Sleep Center
- Surgical Services
- Swing Beds (Skilled Nursing Beds)
- Wellness Screenings

Demographics

Population:	16,558	<18	17%	65+	19.5%	% Rural:	100.00%
		YOA:		YOA:			
Unemployment:	8.4%	%	44.80%	%	55.20%	Graduation	79%
		Females:		Males:		Rate:	
Households:		5,860		MHI:		\$34,299	

Source: Unites States Census Bureau 2017-2018

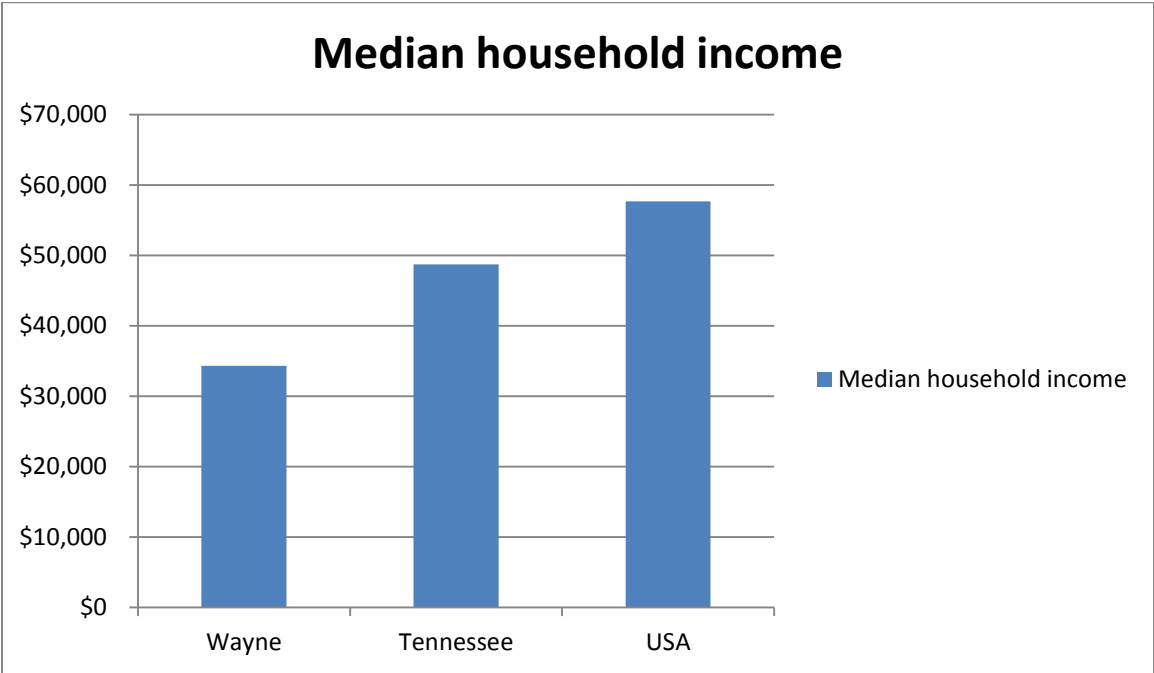
Socio-economic factors (based on the Unites States Census Bureau 2017 data)

1. Income

The median household income in Wayne Medical Center’s service area was relatively low when compared to the State (\$48,708).

Median Household Income by County-2017

Giles	\$43,925
Lawrence	\$41,522
Lewis	\$37,092
Marshall	\$46,837
Maury	\$52,080
Wayne	\$34,299
USA	\$57,652

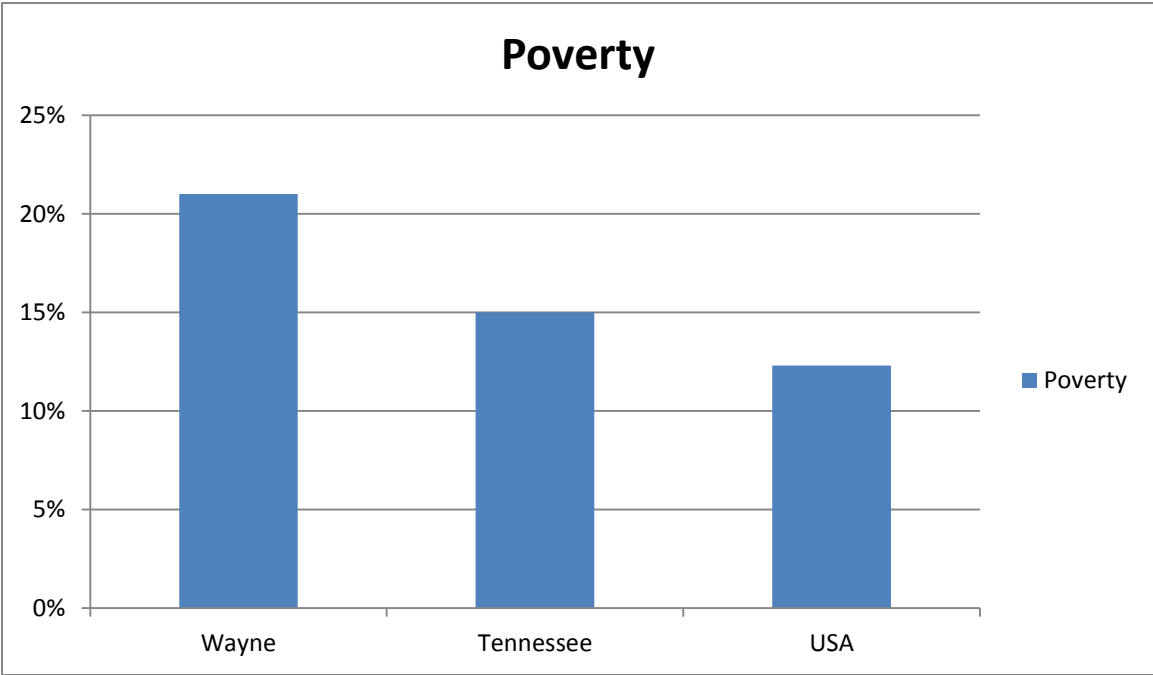


2. Poverty

21% of the population suffers from poverty which is higher than the state value of 15%.

Poverty by County-2017

Giles	15.2%
Lawrence	15.6%
Lewis	17.5%
Marshall	11.7%
Maury	10.2%
Wayne	21%
USA	12.3%

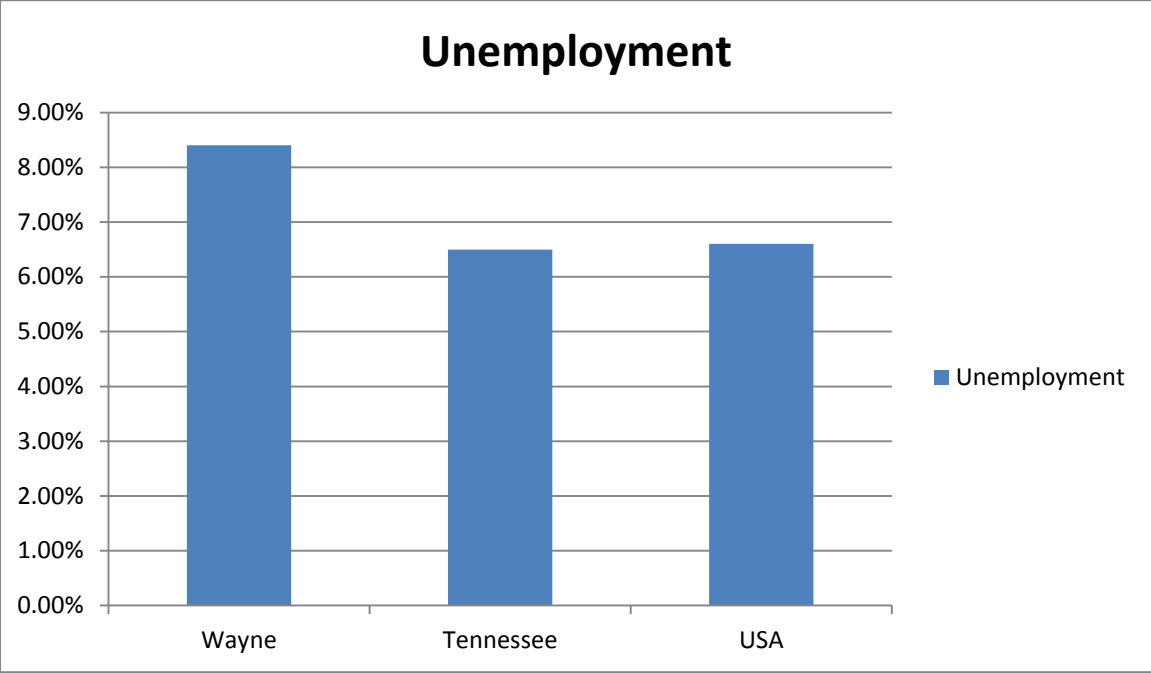


3. Unemployment

According to the 2017 U.S. Census Bureau data, the WMC’s service area unemployment rate (8.4%) was higher than the state of Tennessee (6.5%).

Unemployment Rate by County-2017

Giles	5.9%
Lawrence	8.8%
Lewis	4%
Marshall	6.5%
Maury	6.2%
Wayne	8.4%
USA	6.6%

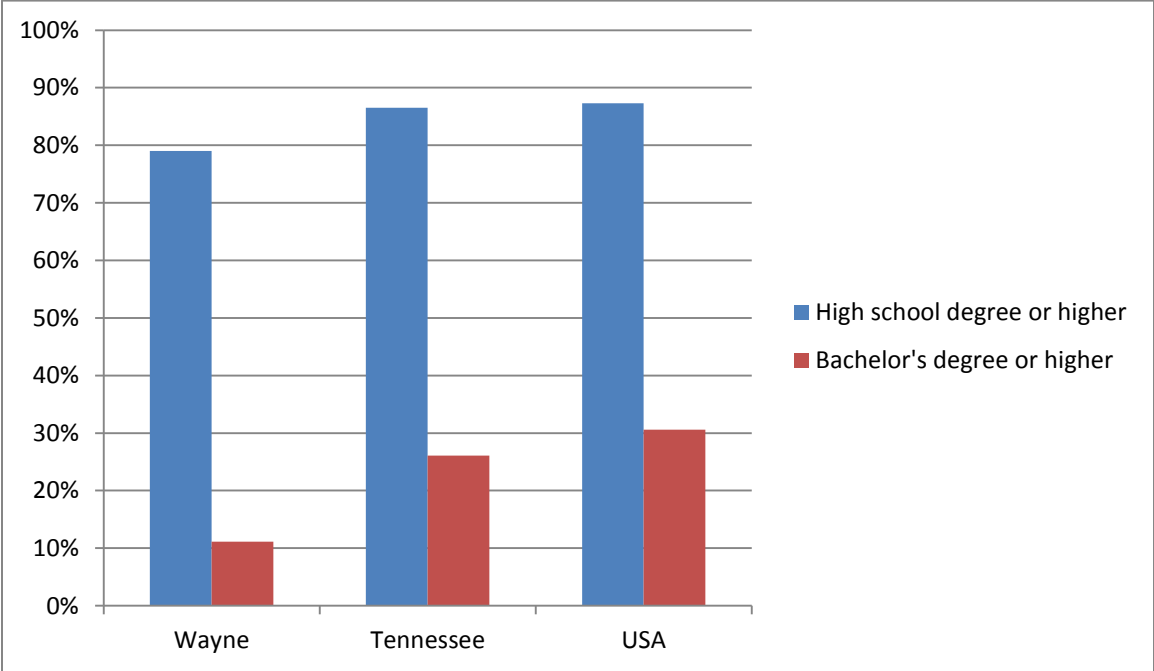


4. Education

The residents with a bachelor’s degree or higher are 11.11% which is far lower than the state value of 26.1%. Whereas the high school graduates are 79% which is lesser than the state value of 86.5%.

Educational Attainment by County-2017

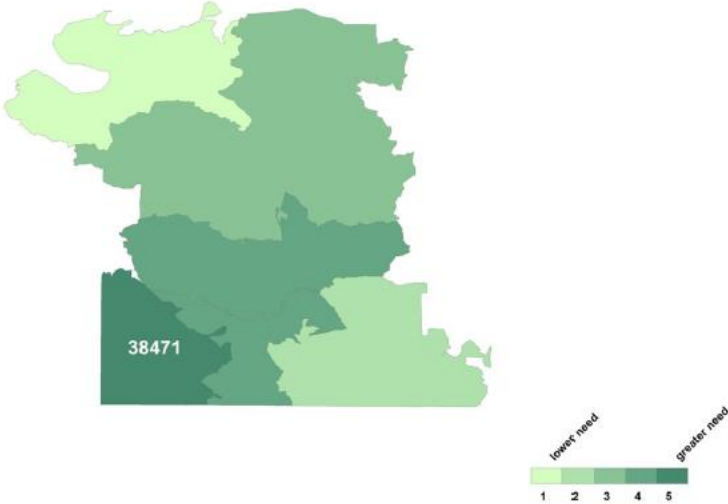
	High School Degree or Higher*	Bachelor’s Degree or Higher*
Giles	84.6%	14.8%
Lawrence	80.8%	12.2%
Lewis	83.2%	12.0%
Marshall	85.3%	13.4%
Maury	89.4%	20.7%
Wayne	79.0%	11.11%
USA	87.3%	30.6%



5. Socio-needs index (Source: Community Health Needs Assessment 2016)

The SocioNeeds Index® developed by the Healthy Communities Institute, incorporates estimates for six social and economic determinants of health — income, poverty, occupation, unemployment, educational attainment, and linguistic barriers. These are associated with poor health outcomes that include preventable hospitalizations and premature deaths. The zip code with the highest level of socioeconomic need is 38471.

Figure 4.8: SocioNeeds Index by Zip Code



Where does Wayne County stand when compared to the TN counties and the nation?

Social and economic factors:

	Popul	High School Graduation		Income Inequality		Social Associations	
		% 9th-grade cohort that graduates in 4 yrs		Ratio household income @ 80th %ile to income at 20th %ile		# membership assoc's / 10,000 pop.	
		Rank	Value	Rank	Value	Rank	Value
US Avg			82%		4.7		9
Wayne	16,913	30	93%	44	4.58	84	7.08

The high school graduation in Wayne county is better than most of the counties in the state on Tennessee and above the US value. The income inequality is average within the state and the nation. Whereas, the social associations are poor in the state and when compared to the nation.

Health outcomes:

	Popul	Premature Death		Poor / Fair Health		Poor Physical Health Days		Poor Mental Health Days	
		Yrs potential life lost before 75yrs / 100,000 pop. (age-adj'd)		% adults reporting fair or poor health (age-adj'd)		Avg # physically unhealthy days rept'd in past 30 days (age-adj'd)		Avg # mentally unhealthy days rept'd in past 30 days (age-adj'd)	
		Rank	Value	Rank	Value	Rank	Value	Rank	Value
US Avg			6,600.0		18%		3.8		2.8
Wayne	16,913	30	9,081.4	79	23.90%	54	4.9	41	4.7

The premature deaths value is good when compared to the state counties but poor in terms of the national value. Wayne’s poor/fair health is worse within the state and nationally. Poor physical health days and mental health days are average within the state and far away from the US values.

Clinical care:

	Popul	Uninsured		Primary Care Physicians		Mental Health Providers	
		% pop < age 65 w/o health insurance		Ratio population to PCPs		Ratio population to mental health providers	
		Rank	Value	Rank	Value	Rank	Value
US Avg			17%		1320:1		490:1
Wayne	16,913	81	18.48%	62	2328:1	85	16913:1

	Popul	Dentists		Preventable Hospital Stays		Diabetic Monitoring	
		Ratio of population to dentists		# hospital stays for ambu- sensitive cond's / 1,000 Medicare enrollees		% diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	
		Rank	Value	Rank	Value	Rank	Value
US Avg			1540:1		54		82.99%
Wayne	16,913	91	16913:1	85	117.15	87	82.99%

In terms of clinical care, Wayne County has worse care in terms of the uninsured, preventable hospital stays and diabetic monitoring. There is a dearth of mental health providers and dentists. This holds true within the state and nationally. Primary care physicians are less in ratio when compared to the population within the state and in terms of US value.

Top Third							
Middle Third							
Bottom Third							
Source: 2016 Tennessee Dept of Health Drive Your County to the Top Ten							

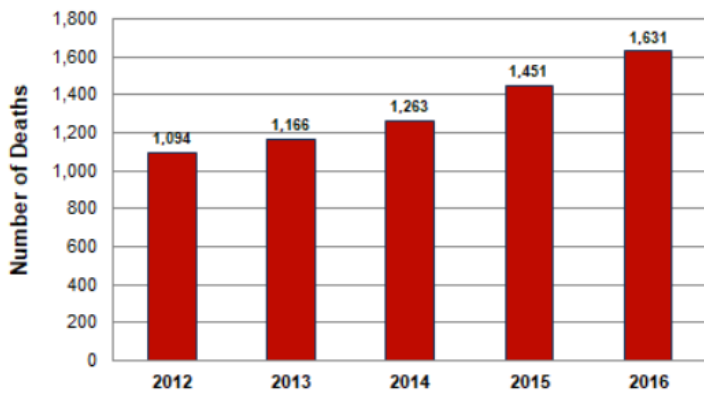
Prescription Drug Abuse

Despite:

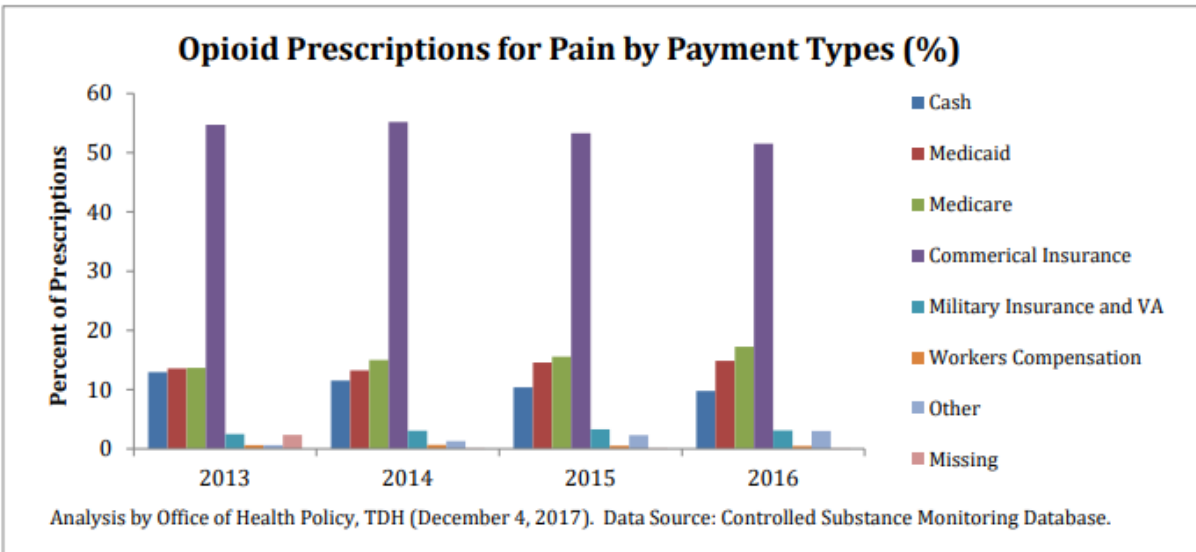
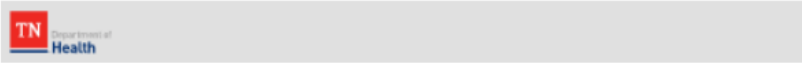
- good medical practice (reductions in the number of opioids prescribed and dispensed)
- fewer doctor shoppers, and
- increased utilization of the CSMD

Drug overdose deaths increased by 12% from 2015-2016.

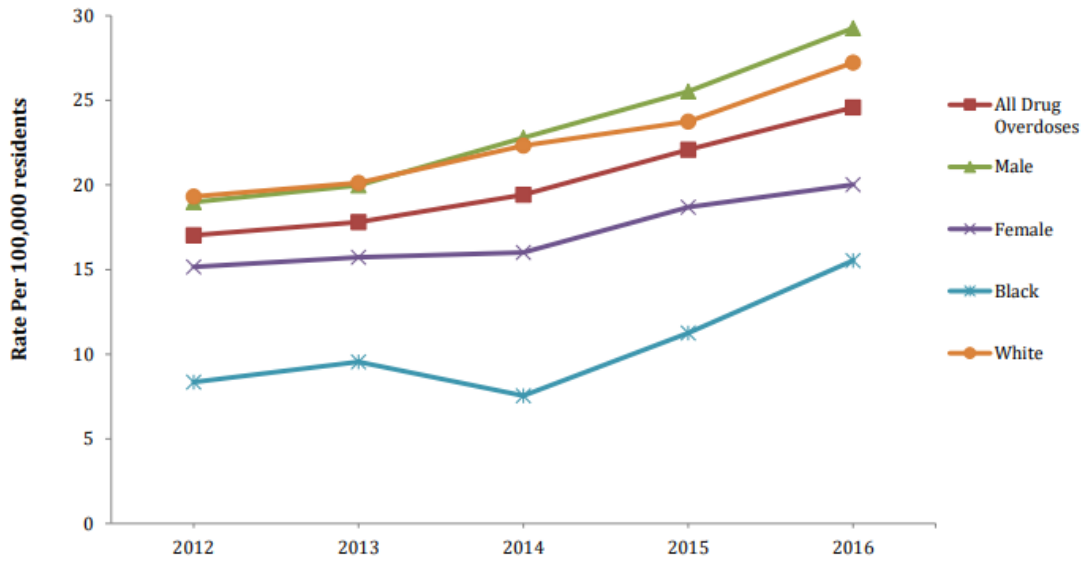
Drug Overdose Deaths in Tennessee, 2012-16



Source: Tennessee Department of Health, Office of Informatics and Analytics



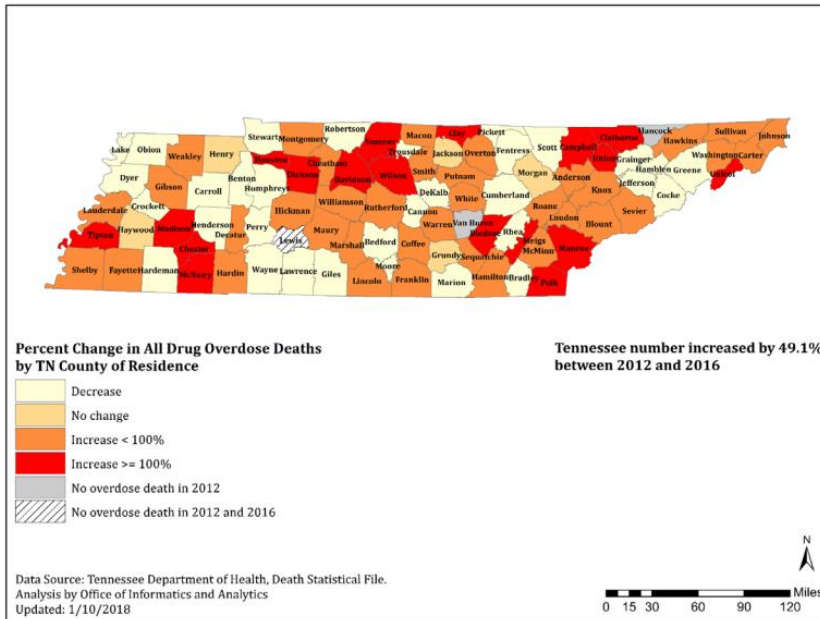
Age-Adjusted Rates for All Drug Overdose Deaths and by Sex and Race in TN by Year



Analysis by the Office of Informatics and Analytics, TDH (last updated December 15, 2017). Limited to TN residents. Data Source: TN Death Statistical File.

Drug Overdose Death Data

Percent Change in Number of All Drug Overdose Deaths by TN County of Residence, 2012-2016¹³



¹³ Rates by county were not calculated due to small sample sizes, which would result in unreliable rates. Percent change values should be interpreted with the caveat that the absolute change may be small, but the percent change value may be large. For example, a change from 1 death to 2 deaths is an absolute change of 1 overdose death, but a percent change of 100%. Alternatively, a change from 130 overdose deaths to 197 is an absolute change of 67 overdose deaths, but only a percent change of 51.5%.

Refer Appendix A for Secondary data sources.

4. Primary Data Findings:

Different themes that emerged from interviewing the 4 key informants within Wayne County.

i. The identified top 3 issues are as follows:

- 1. Transportation (2)
- 2. Opioid crisis (2)

These issues are the most concerning problems for the key informants based on their area of expertise and/or experience.

ii. The issues that are unaddressed according to the key informants are:

Behavioral health (2)	Physical health (2)	Education (2)
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Most of the key informants stated a lack of availability of resources required to address these concerns.

iii. The biggest concern or issue for the key informants are identified as below:

Child abuse (1)	Untrackable follow-ups (1)	Heart failure (1)	Fire fighters (1)	Patient engagement (1)
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The key informants lose sleep over these issues. Child abuse, Heart failure, Untrackable follow-ups, Fire fighters and Patient engagement were the biggest concerns.

iv. The key informants stated these as the most common problems in Wayne County:

Education (3)	Opioid crisis (2)
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v. As a part of the last segment of the interview process, the key informants were given an activity-based task, which would compel them to rank the selected issues. As a result of this, the following ranking emerged:

(1- highest priority; 5-lowest priority)

Quality of Life		Health Topic		Health Topic	
Uninsured rate	1	Substance abuse	1	Exercise, nutrition and weight	1
Transportation	2	Mental health and mental disorders	2	Maternal, fetal and infant health	2
Economy	3	Access to health services	3	Heart disease and stroke	3
Educational attainment	4	Diabetes	4	Cancer	4
Per capita income	4	Teen births	5	Prevention and safety	4

Number 1 priority: (based on forced ranking)

Uninsured rate	Substance Abuse
Exercise, nutrition & weight	

Please refer to Appendix B for the scoring criteria of the forced ranking.

Common pressing themes across regions: (CHNA 2019)

Maury	Marshall	Wayne	Lewis
Mental health (15)	Opioid crisis (9)	Education (4)	Opioid crisis (9)
Opioid crisis (13)	Mental health (6)	Opioid crisis (5)	Patient engagement (2)
Diabetes (9)	Education (3)	Obesity (2)	Exercise, food & nutrition (2)
Obesity (5)	Behavioral health (2)	Exercise, food & nutrition (2)	Internet safety (2)
Hypertension (8)	Heart disease (3)	Transportation (3)	Vaping (2)
Exercise, food & nutrition (10)	Lack of economic opportunities (4)	Access to health care (2)	Family disruptions (2)
Access to health care (8)	Access to health care (3)	Heart disease (2)	

Refer Appendix B for the common pressing themes under the primary data collection methods.

5. Table of contents

Appendix A: Secondary data

Appendix B: Primary data

Appendix A: Secondary Data

A total of 9 data sources were used to gather the secondary data.

The determinants of health data were taken from the U.S. Census Bureau 2017-2018. The values for six counties; Maury, Marshall, Lewis, Wayne, Lawrence and Giles were used for a county level comparison. The Marshall County performance was then compared to the state and national average.

The social and economic factors, health outcomes and clinical care data of the following counties: Wayne, Marshall, Hickman, Lewis, Giles, Lincoln, Maury, Perry and Lawrence; along with the U.S. average was taken from the 2016 Tennessee Department of Health Drive Your County to the Top Ten.

The Tennessee Department of Health, Office of informatics and Analytics; Controlled Substance Monitoring Database and the Death Statistical File were used for the prescription drug abuse data.

Secondary data sources:

Community Health Needs Assessment Chittenden and Grand Isle Counties, Vermont.

Drug Investigation Division

National Institute on Drug Abuse (NIDA).

State Health Plan

Drive Your County to the Top Ten

Maury Regional Medical Center Community Health Needs Assessment.

Prescription Drug Abuse and Pain Management Clinics

U.S. Census Bureau QuickFacts: United States.

Appendix B: Primary data

To gather the required information from the key informants, an interview guide consisting of twelve questions was used as a template. The following questions were asked:

Interview questions

- 1. Which organization are you representing?
- 2. What category does this organization belong to:

Education	Government
Health	Private
Advocacy	Not for profit
Faith-based	For profit
Social service	

- 3. Do you work for one or more of the below mentioned counties?

Maury	Lewis
Marshall	Lawrence
Wayne	Giles

- 4. What are the most common health problems in this county?
- 5. What are some challenges encountered while addressing the health needs?
- 6. What inhibits the patients from adopting some behaviors?
- 7. What are some challenges that you face while helping the patients/community that you serve?
- 8. What are the top 3 health issues faced by this community/county?
- 9. How can hospitals improve health services and quality of life of people here?
- 10. What do you consider are the unaddressed needs of the community?
- 11. In your opinion, why are these needs not being addressed?
- 12. What are the current resources available to address the health concerns and how can we do better?

At the end of the interview, an activity-based task was given to the key informants, which was aimed at deriving a forced ranking. Three buckets were created aiming at economic issues, health issues and access.

If you had \$100, how would you spend on each category? (Options: 0, 10, 15, 25 & 50)

Per capita income	
Uninsured rate	
Transportation	
Economy	
Educational attainment	

Diabetes	
Substance Abuse	
Teen births	
Mental Health & Mental Disorders	
Access to Health Services	

Prevention & Safety	
Cancer	
Maternal, Fetal & Infant Health	
Heart Disease & Stroke	
Exercise, Nutrition, & Weight	

The limitation of this activity was that not all key informants used the five denominations mentioned and repeated the denominations in the same bucket. To come at a conclusion, we ranked the denominations as follows:

Denomination	Rank
0	5
10	4
15	3
25	2
50	1

A sum of the ranks for each category gave us a score, which was then used to determine the final rank. Lowest score implies the highest ranking, or the number one priority and highest score implies the lowest ranking or the least priority.

Categories	Forced ranking	Score
Per capita income	4	13
Uninsured rate	1	9
Transportation	2	10
Economy	3	11
Educational attainment	4	13
Diabetes	4	13
Substance abuse	1	4
Teen births	5	18
Mental health and mental diso	2	8
Access to health services	3	10
Prevention and safety	4	13
Cancer	4	13
Maternal, fetal and infant health	2	9
Heart disease and stroke	3	11
Exercise, nutrition and weight	1	7

For the interview questions, the challenge was that not all twelve questions were asked during the interview, as they were only an interview guide. The four key informants did not always give answers to all the questions that were asked. Based on the availability of answers provided, the burning questions that were answered and were most frequent, were considered for the assessment. The number mentioned next to each category represents the number of times it was mentioned during that question.

i. Top 3 concerns

Concerns	Frequency
Poverty	1
Access to healthcare	1
Transportation	2
Exercise, nutrition and weight	1
Dental needs	1
Obesity	1
Opioid crisis	2
Cancer	1

Summary of top 3 concerns:

This list emerged based on the most frequently mentioned problems. The categories with only one vote/answer were eliminated and the rest were considered.

Transportation (2)	Opioid Crisis (2)
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ii. The unaddressed needs of the county:

The following responses were listed when the unaddressed needs of the county were mentioned by the key informants. These were the needs that were not getting enough attention.

Unaddressed needs	Frequency
Behavioral health	1
Physical health	1
Education	1

The issues that were considered were the once with more than one frequency in responses. These are mentioned below:

Behavioral health (2)	Physical health (2)	Education (2)
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iii. The biggest concern

The following issues were considered as the biggest concerns according to the key informants.

Biggest concern	Frequency
Child abuse	1
Untrackable follow-ups	1
Heart failure	1
Fire fighters	1
Patient engagement	1

iv. The common problems of the county:

The following were mentioned as the common problems of the county:

Common problems	Frequency
Transportation	1
Education	3
Access to providers	1
Opioid crisis	2
Unemployment	1
Exercise, food & nutrition	1
Diabetes	1
Heart disease	1
Obesity	1

The top 2 problems were considered as the common problems of the county. These are as follows:

Opioid crisis (2)	Education (3)
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- v. The common pressing themes of the 4 counties were derived based on the frequency of occurrence of issues under the 4 categories: top 3 issues, unaddressed needs, biggest concern and common problems of the county. The overall top 7 issues for each county was taken into consideration (on page 30).

The common pressing themes:

Maury	Marshall	Wayne	Lewis
Mental health (15)	Opioid crisis (9)	Education (4)	Opioid crisis (9)
Opioid crisis (13)	Mental health (6)	Opioid crisis (5)	Patient engagement (2)
Diabetes (9)	Education (3)	Obesity (2)	Exercise, food & nutrition (4)
Obesity (5)	Behavioral health (2)	Exercise, food & nutrition (2)	Internet safety (2)
Hypertension (8)	Heart disease (3)	Transportation (3)	Vaping (2)
Exercise, food & nutrition (10)	Lack of economic opportunities (4)	Access to health care (2)	Family disruptions (2)
Access to health care (8)	Access to health care (3)	Heart disease (2)	

Primary data participants

Organization represented	Name
Wayne Health Department	Devin Toms
Wayne Health Department	Erica Barnett
Joint Economic & Community Development Board	Rena Purdy
Wayne Medical Center	Dean Steagall

Maury Regional Medical Center
Attention: Mark Kirschbaum
CHNA Feedback
1224 Trotwood Avenue
Columbia, Tennessee 38401

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