

Owensboro Health
Twin Lakes Medical Center

COMMUNITY HEALTH NEEDS ASSESSMENT

2021 - 2024



910 Wallace Avenue
Leitchfield, KY 42754
(270) 259-9400

[https://www.owensborohealth.org/locations/profile/
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Executive Summary

Owensboro Health Inc. (OHI) owns and operates Owensboro Health Twin Lakes Medical Center, a 75 bed hospital in Grayson County, Kentucky. Owensboro Health Twin Lakes Medical Center (OHTLMC) is pleased to present its 2021-2024 Community Health Needs Assessment (CHNA). OHTLMC contracted with the Community and Economic Development Initiative of Kentucky (CEDIK) to conduct a CHNA in accordance with the Affordable Care Act (ACA) and section 501(r) of the Internal Revenue Code for nonprofit tax-exempt hospitals. This CHNA is the first report prepared by CEDIK for OHTLMC. This report will be used to create an implementation plan to address the identified health needs for the community served by OHTLMC over the next three years. The Owensboro Health, Inc. Board of Directors approved this CHNA on May 23, 2022.

Summary of Findings

Methodology

CEDIK facilitated the process of primary data collection through focus groups and key informant interviews to support OHTLMC in their creation of an implementation plan to address identified health needs. In addition, county specific secondary data was gathered to help examine the social determinants of health. Throughout the process, CEDIK made it a priority to get input from populations that are often not engaged in conversations about their health needs or gaps in service. CEDIK conducted three key informant interviews to probe more deeply into health and quality of life themes within the county. Potential barriers to accessing community resources were also identified in these interviews.

This CHNA report synthesizes community health needs survey data, focus groups with vulnerable populations, and key informant interview data with social and economic data as well as health outcomes data collected from secondary sources to help provide context for the community. Below are identified themes collected from the primary data collection:

Focus Group Visioning

Residents describe their vision of a vibrant, healthy Grayson County: a philanthropic community that exhibits a passion for volunteerism; shared mission and goals for health among community organizations; access to healthy foods; access to parks and recreation; access to primary health care; transportation; quality mental health care including recovery and addiction services; strong education system; reduced tobacco use and vaping; reduced obesity and heart disease.

Focus Groups – Unmet Needs

Three focus groups were conducted by CEDIK in Grayson County to discuss health needs of populations with unmet health needs and to deepen the understanding of the health challenges they face. Focus group discussions revealed unmet needs across the low-income and vulnerable populations. Common concerns across these populations include: obesity – in children and adults; tobacco use and vaping; food insecurity and poor diet; substance use and addiction – drugs, alcohol and illicit substances; mental health services for adults and youth - lack of providers and long wait times; chronic diseases including diabetes, heart disease, and lung diseases; primary care providers; transportation; dental care – providers who accept

Medicaid; aging population health care – hearing and vision care for elderly; need for affordable child care; homelessness and need for quality, safe housing across all income brackets.

Key Informant - Community Themes and Strengths

OHTLMC and CEDIK obtained additional primary data through four key informant interviews with individuals knowledgeable about health and quality of life needs in Grayson County. CEDIK organized the data into strengths, barriers, and opportunities for change for Grayson County. Strengths included collaborative partners across multiple sectors; the addition of Owensboro Health is an asset and strong employer in the community; high quality health care is available in the community. Challenges faced by residents include need for increased economic development to increase employment with living wages; transportation needs to access health care and essential services; not enough mental health and primary care providers; need for more communication of hospital services. Several opportunities were highlighted, including increased health care provided in schools; health education opportunities in schools and community; add indoor recreation opportunities; expanding EMS services, substance use treatment, dental care for Medicaid population and increased promotion of available community and health care services.

Prioritized Areas

Based on survey results, focus group and key informant interview results, as well as key secondary health data, there were four priority areas identified. Existing local, state and national priorities were considered. This information can assist the hospital as implementation plans are developed to address the prioritized health needs. The following priorities were identified as areas of need to address in the next three years:

- **Address Chronic Health Conditions**
- **Address Obesity/Physical Inactivity**
- **Address Mental Health**
- **Address Substance Abuse**

A plan for addressing these priority areas will be described in the OHTLMC Implementation Strategy.

Acknowledgments

This Community Health Needs Assessment is a joint effort by the Owensboro Health Twin Lakes Medical Center and the Community and Economic Initiative of Kentucky (CEDIK), and builds on the community health improvement efforts of the prior CHNA.

Four key informants shared their time and expertise to provide additional insights on strengths and needs in Grayson County:

- Jason Woosley, Grayson County Jailer
- Lisa Skaggs, Wilkey Elementary School Principal
- Sue Greenwell, Lincoln Trail Area for Aging and District Development
- Laura Jessie, Owensboro Health Twin Lakes Medical Center Social Services

CEDIK at the University of Kentucky provided assistance with the collection and analysis of primary key informant data and compilation of this analysis. CEDIK works with stakeholders to build engaged communities and vibrant economies. If you have questions about CEDIK's assessment process, contact Melody Nall, CEDIK Extension Specialist Administrator: melody.nall@uky.edu or (859) 218-5949.

Owensboro Health Twin Lakes Medical Center would like to thank CEDIK, all community partners and key informants for their contributions to the information compiled in this document.



910 Wallace Avenue
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2021-2024

Dear Grayson County Residents,

Thank you for your interest in Owensboro Health Twin Lakes Medical Center's 2021-2024 Community Health Needs Assessment (CHNA). The purpose of this assessment is to help Owensboro Health Twin Lakes Medical Center, in partnership with our community and healthcare partners, to identify respective health concerns, measure the impact of current public health efforts and guide the appropriate use of resources.

The data reflected in this report was collected from surveys, focus groups, and key informant interviews conducted in our community. These results are being reported along with health information collected from reputable national, state and local data sources.

We were grateful to be able to collaborate with numerous community partners to make this report as valuable as possible. Through our work together on the CHNA we strive to positively affect the identified health needs and live out our mission "to heal the sick and improve the health of the communities we serve."

Sincerely,

A handwritten signature in blue ink that reads "Mark Marsh".

Mark Marsh
President and Chief Executive Officer
Owensboro Health

A handwritten signature in blue ink that reads "Ashley G. Herrington".

Ashley G. Herrington
Chief Executive Officer
OHTLMC

1. Introduction

1.1 CHNA Report Objective

The purpose of a Community Health Needs Assessment (CHNA) is to understand health needs and priorities in a given community, with the goal of addressing those needs through the development of an implementation strategy. Owensboro Health Twin Lakes Medical Center (OHTLMC) has produced this CHNA in accordance with the Affordable Care Act (ACA) and section 501(r) of the Internal Revenue Service tax code for nonprofit tax exempt hospitals. The results are meant to guide OHTLMC in the development of an implementation strategy and to help direct overall efforts to impact priority health needs. The Owensboro Health, Inc. Board of Directors approved this CHNA on <>.

1.2 Owensboro Health Twin Lakes Medical Center

Owensboro Health is a nonprofit health system with a mission to heal the sick and to improve the health of the communities it serves in Kentucky and Indiana. The system includes Owensboro Health Twin Lakes Medical Center. OHTLMC is affiliated with the Owensboro Health Medical Group, comprising over 180 providers in 25 locations, a certified medical fitness facility and the Mitchell Memorial Cancer Center. Owensboro Health has been recognized for outstanding care, safety and clinical excellence by The Joint Commission, Healthgrades, U.S. News & World Report and Becker's Hospital Review. For more information, visit owensborohealth.org.

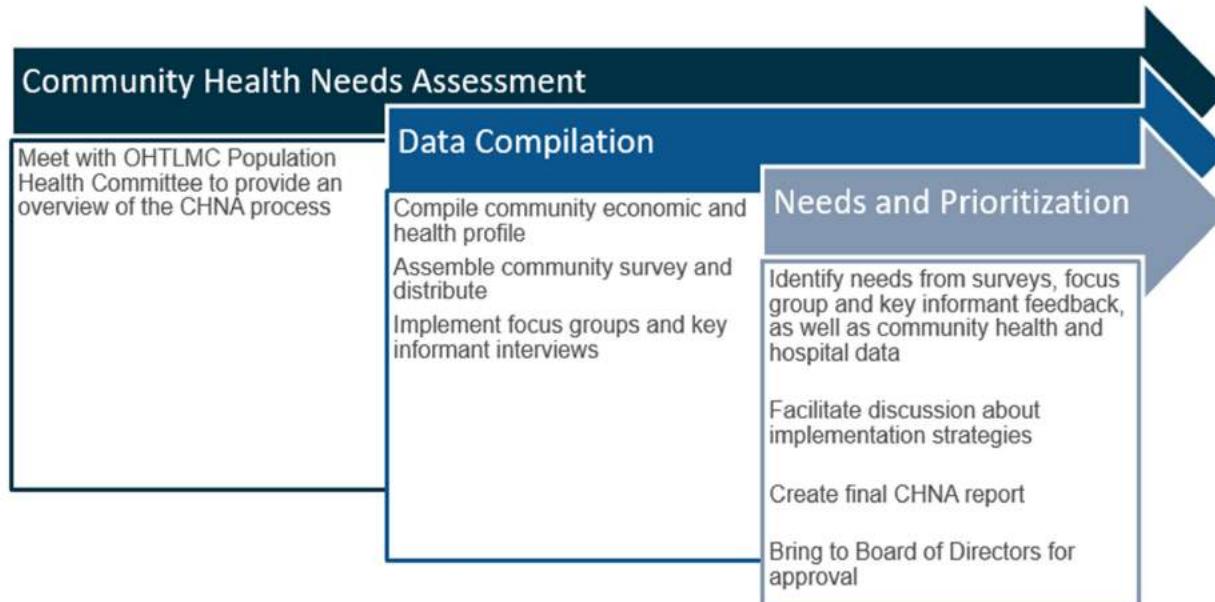
1.3 CHNA Defined Community

Owensboro Health Twin Lakes Medical Center determined its defined service area for this Community Health Needs Assessment as Grayson County, Kentucky.

1.4 CHNA Process

Here is an overview of the CHNA process that CEDIK uses, based on the IRS guidelines:

Figure 1. CHNA Process



2. Reported Successes 2018-2021

Goals from 2018-2021 CHNA Reported Successes in Implementation

<p>GOAL 1. Address Mental Health</p> <p>Key Objectives:</p> <p>Make services for mental health more readily available.</p> <p>Work to reduce stigma surrounding mental health by providing education.</p> <p>Collaborate with local mental health providers to identify gaps in services.</p>	<p>In addition to partnering with the local mental health centers serving Grayson County and other providers, TLRMC (currently known as OHTLMC) is planning potential new services for a geriatric psychiatric inpatient unit, utilizing the Owensboro Health Regional Hospital inpatient behavioral health services, and telehealth behavioral health interventions will engage with additional mental health resources available to the community at large.</p> <p>Mental health issues among both youth and adults are increasing and have been exacerbated by the world-wide pandemic. While this has made community education a challenge, TLRMC (currently known as OHTLMC) will be continuing to work with the population health committee to explore strategies to address this growing issue. Prior to the pandemic TLRMC (currently known as OHTLMC) hosted the second annual Community Mental Health and Addiction Resource Awareness Fair in Grayson County. Over 30 vendors gathered to educate over 200 participants and inform of services available locally.</p> <p>GOAL 2. Address Substance Abuse</p> <p>Key Objectives:</p> <p>Make treatment options available locally.</p> <p>Educate the community on addiction to expand understanding and the need for community support.</p> <p>Focus on safer prescribing methods to enhance preventative strategies.</p>
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<p>of substance use disorder and education when possible to the community regarding substance use prevention.</p> <p>Prior to the pandemic TLRMC (currently known as OHTLMC) hosted the second annual Community Mental Health and Addiction Resource Awareness Fair in Grayson County. Over 30 vendors gathered to educate over 200 participants and inform of services available locally.</p> <p>Staff at TLRMC (currently known as OHTLMC) provided Narcan Education and supply to emergency responders and also conducted Project Darius within the Grayson County School System.</p>	<p>GOAL 3. Address Childhood Health</p> <p>Key Objectives:</p> <ul style="list-style-type: none"> Participate in events related to childhood health. Become more involved in our local school system. Encourage community members to join local groups engaged in increasing childhood health efforts. <p>TLRMC (currently known as OHTLMC) has recognized and acknowledged in its previous work in the development of CHNAs the issues of obesity, nutritional health and the safety and well-being of children. The hospital has deployed its team members to serve on local boards such as CASA (Court Appointed Special Advocates) and the poverty coalition to specifically address needs of the county's children. A partnership with the Extension Master Gardener's Club resulted in the formation of a community garden to address food insecurity and access to fresh produce for children and families.</p> <p>Community collaborative efforts have initiated in the pursuit of a Safe Haven Baby Box, a safety device provided under a state's Safe Haven Law to protect and care for babies should a mother in crisis needs to surrender her baby. TLRMC (currently known as OHTLMC) participates in local county baby showers, educational safety and health events to promote a community which cares for and addresses the health needs of its community.</p> <p>TLRMC (currently known as OHTLMC) conducts CPR and first aid training for staff at local day care centers. Lastly, TLRMC (currently known as OHTLMC) participates in local events such as Safety Day at H.W. Wilkey Elementary and Career Day at Grayson County Middle School.</p>
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GOAL 4. Address Community Health Education	<p>The population health committee which started as a result of the CHNA process is a community driver and the committee is inclusive of the many partners who have come together to address the health needs of Grayson Countians. Information is shared by community partners and this was never more evident than the needs presented by COVID 19. While many face to face gatherings and educational programs were cancelled, some entities have provided virtual education and TLRMC (currently known as OHTLMC) provided educational materials when requested to assist the community and shared community COVID related information, partnering with local public health officials and media.</p> <p>Key Objectives:</p> <ul style="list-style-type: none"> Utilize social media to its full capacity to spread information. Become more involved in local organizations to spread awareness on predetermined health topics. Partner with local organizations to provide unified campaigns on predetermined health topics. <p>TLRMC (currently known as OHTLMC) also participates in many events such as The Think Pink Breast Cancer Awareness 5K, Miscarriage and Infant Loss Awareness Walk and any health fairs hosted within the community in an effort to spread health information.</p>
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- 1) *Share a quote from your CEO or other hospital representative that highlights a meaningful event or success that resulted from addressing your identified priorities over the past 3 years:*

The COVID-19 pandemic changed our organization in many ways. One of the opportunities created as a result of the pandemic was providing awareness and education through local organizations about the disease and partnering with our local community organizations to present a unified campaign about the effectiveness of the COVID-19 vaccine. Additionally, OHTLMC partnered with the local health department to provide vaccines to the school district employees and local industries and administered over 5,000 vaccines as a regional vaccine site in the state. The hospital's response to the COVID-19 pandemic put us at the forefront of public health in our community during this most difficult time.
- 2) *"By the Numbers" (optional) Please send any numbers from your community benefits reports over the past three years that you would like to share. This will allow us to create an infographic that illustrates the impact your hospital has on your community.*

From 2018-2021, over 11,500 people served through varies events TLRMC (currently known as OHTLMC) participated in, and over \$82,000 community benefit dollars spent.

3. Grayson County Data

3.1 2021 County Health Rankings Data

In this section, publicly available data are presented for Grayson County. These data come from County Health Rankings & Roadmaps, The Kentucky Injury Prevention and Research Center, and the Kentucky Cancer Registry. These sites provide social, economic, and health data that is intended for use by communities to understand the multiple factors that influence population health. These data were accessed in March and April 2022. See appendix for secondary data sources and years.

Table 1. Population Characteristics

	Grayson County	Kentucky	US Overall
2019 Population	26,427	4,467,673	328,239,523
Percent of Population under 18 years	23.2%	22.4%	22.3%
Percent of Population 65 year and older	18.1%	16.8%	16.5%
Percent of Population Non-Hispanic Black	1.2%	8.2%	13.4%
Percent of Population American Indian & Alaska Native	0.3%	0.3%	1.3%
Percent of Population Asian	0.3%	1.6%	5.9%
Percent of Population Native Hawaiian/Other Pacific Islander	0.0%	0.1%	0.2%
Percent of Population Hispanic	1.4%	3.9%	18.5%
Percent of Population Non-Hispanic White	95.8%	84.1%	60.1%
Percent of Population not Proficient in English	0%	1.0%	8.3%
Percent of Population Female	49.8%	50.7%	50.8%
Percent of Population Rural	73.6%	41.6%	14%

Table 2. Health Outcomes

Years of Potential Life Lost Rate	11132	9505	6900
Percent Fair or Poor Health	28	22%	17%
Average Number of Physically Unhealthy Days	5.8	4.6	3.7
Average Number of Mentally Unhealthy Days	5.7	5.0	4.1
Percent Low Birthweight	9	9%	8%

Table 3. Health Behaviors

	Grayson County	Kentucky	US Overall
Percent Smokers	28	24%	17%
Percent Adults with Obesity	44	35%	30%
Food Environment Index	6.3	6.9	7.8
Percent Physically Inactive	35	29%	23%
Percent with Access to Exercise Opportunities	62	71%	84%
Percent Excessive Drinking	15	17%	19%
Percent Driving Deaths with Alcohol Involvement	24	25%	27%
Fatal overdose (any drug)*	30.2	43.9	-
Non-fatal overdose – ED visits*	268.13	288.0	-
SUD diagnosis – ED visit*	641.99	1020.1	-
Chlamydia Rate	307.3	436.4	539.9
Teen Birth Rate	43	31	21

Table 4. Access to Care

Percent Uninsured	7%	7%	10%
Number of Primary Care Physicians	15	2,895	-
Primary Care Physicians Rate	57	65	-
Primary Care Physicians Ratio	1755:1	1543:1	1320:1
Number of Dentists	9	2,996	-
Dentist Rate	34	67	-
Dentist Ratio	2936:1	1491:1	1400:1
Number of Mental Health Providers	28	10,733	-
Mental Health Provider Rate	106	240	-
Mental Health Provider Ratio	944:1	416:1	380:1

*Data from the Kentucky Injury Prevention and Research Center – data are reported as rate per 100,000 population.

Table 5. Social & Economic Factors

	Grayson County	Kentucky	US Overall
Percent Completed High School	81%	86%	88%
Percent with Some College Education	47%	62%	66%
Number Unemployed	552	89,014	-
Number in Labor Force	11,029	2,072,597	-
Percent Unemployed	5.0%	4.3%	3.7%
80th Percentile Income	\$80,930	\$101,776	-
20th Percentile Income	\$17,126	\$20,248	-
Percent of Children in Poverty	30%	21%	17%
Number of Children in Single-Parent Households	1,286	265,296	-
Number of Children in Households	6,260	1,005,667	-
Percent of Children in Single-Parent Households	21%	26%	26%
Number of Associations	16	4,732	-
Social Association Rate	6.1	10.6	9.3
Annual Average Violent Crimes	24	9,824	-
Violent Crime Rate	93	222	386
Number of Injury Deaths	165	21,274	-
Injury Death Rate	125	96	72

Table 6. Physical Environment

Average Daily PM2.5	8.8	8.7	7.2
Presence of Water Violation	No	n/a	n/a
Percent with Severe Housing Problems	14%	14%	18%
Percent with Severe Housing Cost Burden	11%	11%	14%
Percent with Overcrowding	2%	2%	-
Percent with Inadequate Facilities	1%	1%	-
Percent that Drive Alone to Work	81%	82%	76%
Number of Workers who Drive Alone	10,528	1,949,184	-
Percent with Long Commute - Drives Alone	34%	31%	37%

Table 7. Top 10 Invasive Cancer Incidence Rates

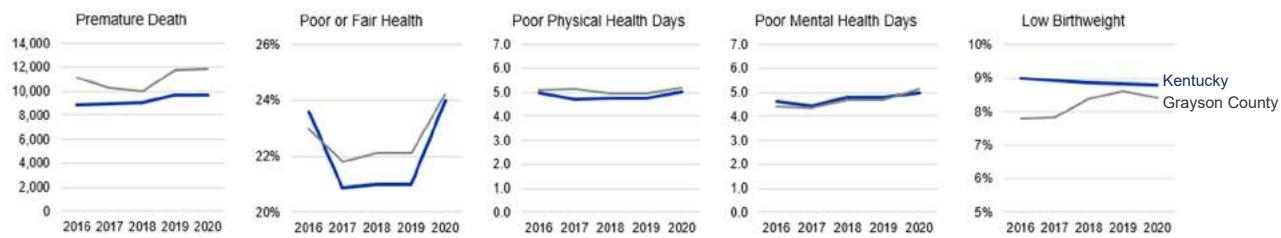
<i>All Genders, All Races</i>	Grayson County	Crude Rate	Age-adjusted Rate
Total all sites over 5 years (2014-2018)	919	702.1	551.9
Lung & Bronchus	176	134.5	97
Colon & Rectum	96	73.3	57
Breast	87	66.5	56
Prostate (males only)	83	125.9	94.6
Melanoma of the Skin	48	36.7	31.1
Urinary Bladder, invasive and in situ	48	36.7	30
Non-Hodgkin Lymphoma	40	30.6	22.9
Miscellaneous	36	27.5	23.2
Kidney & renal pelvis	33	25.2	18.7
Pancreas	32	24.4	18.8

Note: All rates are per 100,000 population. All rates are age-adjusted to 2000 US Standard Million Population.

3.2 2016-2020 County Health Rankings Data Trends

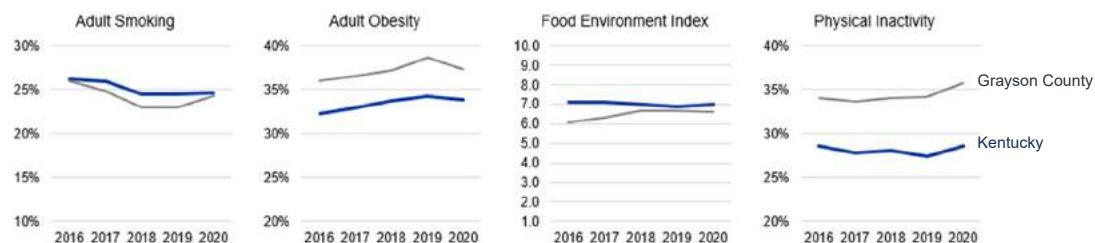
Next, to provide more context to the ongoing health of the community, we present five year data trends (2016-2020) for Grayson County alongside the state average. These data come from the *County Health Rankings & Roadmaps* website and include selected health outcomes, health behaviors, and access to care as well as social, economic, and environmental factors that impact the health of Grayson County residents.

Figure 2. Health Outcomes, 2016-2020



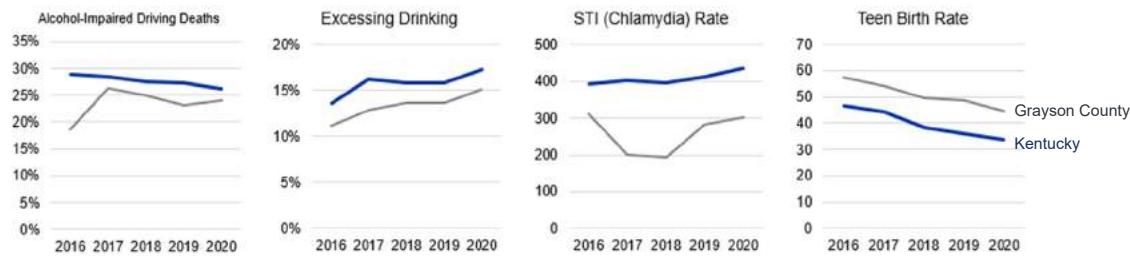
- The middle three variables are based on self-reported data from BRFSS (Behavioral Risk Factor Surveillance System). All three are on an upward trend for the County and state.
- The County's low birthweight is trending upward overall.

Figure 3. Health Behaviors, 2016-2020



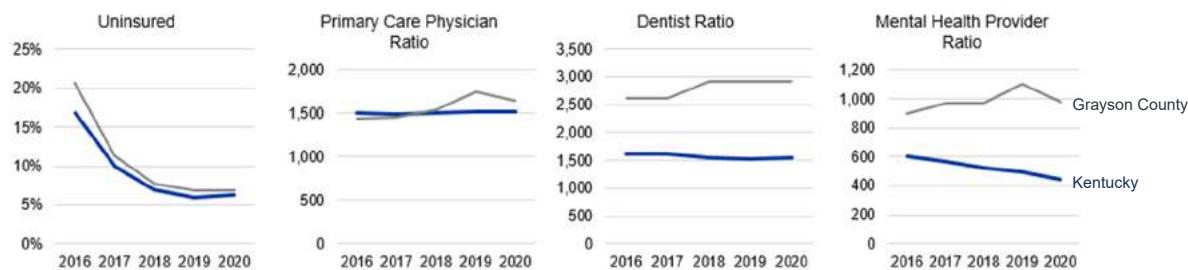
- Adult smoking in the County is trending downward overall.
- Adult obesity and physical inactivity in the County is trending upward overall.
- The higher the number on the USDA Food Environment Index (0-10) the better the Food Environment. The County has a lower score than the state average.

Figure 4. Health Behaviors, continued, 2016-2020



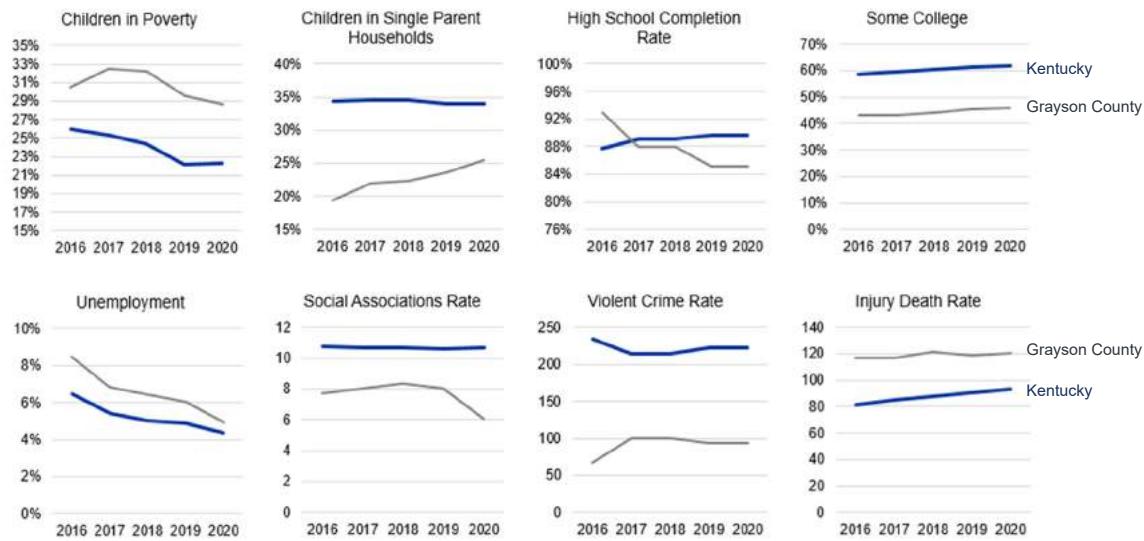
- There is an overall upward trend of excessive drinking and alcohol-impaired driving deaths.
- The County's STI rate trend is unclear.
- The County's teen birth rate is trending downward.

Figure 5. Access to Care, 2016-2020



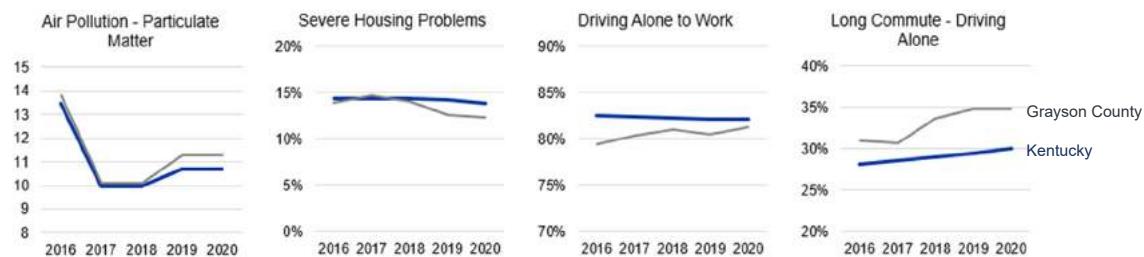
- The County's ratio of all three types of health care providers is higher (less providers for population) compared to the state average.
- County uninsurance rates are on par with the state.

Figure 6. Social & Economic Factors, 2016-2020



- The County has a higher percentage of children in poverty compared to the state. The County also has an upward trend of percent of children in single parent households, however the rate is lower than the state average.
- County high school completion rates are below the state average, and percent of the County population with some college education is also below the state average.
- While the unemployment rate is higher in the County, compared to the state, the rate of decline mirrors the state average (pre-pandemic).
- The County's rate of social associations is on a downward trend (again, pre-pandemic).
- The County's injury death rate and violent crime rate have a stable trend.

Figure 7. Physical Environment, 2016-2020



- Air pollution in the County is higher than the state average and follows the state's five year trend.
- The County's severe housing problems trend has an overall downward trend.
- The County population driving alone to work is trending upward; also trending upward is the County population making long commutes driving alone.

4. Hospital Utilization Data

The Tables below provide an overview of Owensboro Health Twin Lakes Medical Center's patients and in particular how they pay, and why they visited.

Table 8. Hospital Usage, 1/1/2020 - 12/31/2020

Patient Status	Total
Inpatient Discharges	2,183
Outpatient Visits	63,863

Table 9. Hospital Inpatient Payer Mix, 1/1/2020 - 12/31/2020

Payer	Discharges
Medicare (Excluding Medicare Managed Care)	609
Passport Medicaid Managed Care	463
Commercial - Anthem Health Plans of KY PPO Plan	279
Medicare Managed Care	247
Commercial - Wellcare Health Plans of KY HMO Plan	109
Commercial - Other	93
Self Pay	80
Humana Medicaid Managed Care	72
Anthem Medicaid Managed Care	62
Aetna Better Health of KY Medicaid Managed Care	54
In State Medicaid	41
Commercial - Humana POS Plan	27
VA	13
Commercial - PPO	9
Tricare (Champus)	9
Charity defined according to the hospital policy at time of discharge	6
Auto Insurance	4
Workers Compensation	3
Out of State Medicaid	2

Table 10. Hospital Outpatient Payer Mix, 1/1/2020 - 12/31/2020

Payer	Visits
Medicare (Excluding Medicare Managed Care)	17201
Commercial - Anthem Health Plans of KY PPO Plan	11414
Passport Medicaid Managed Care	11117
Medicare Managed Care	8665
Commercial - Other	3080
Commercial - Wellcare Health Plans of KY HMO Plan	2345
Humana Medicaid Managed Care	1734
Anthem Medicaid Managed Care	1448
Commercial - Humana POS Plan	1380
Aetna Better Health of KY Medicaid Managed Care	1168
Self Pay	1080
In State Medicaid	977
Tricare (Champus)	552
Commercial - PPO	481
Workers Compensation	440
Auto Insurance	298
VA	200
Commercial - Cigna Health & Life FFS Plan	109
WellCare of Kentucky Medicaid Managed Care	77
ChampVA	45
Out of State Medicaid	25
Charity defined according to the hospital policy at time of discharge	21
Commercial - Caresource Kentucky HMO Plan	6

Table 11. Hospital Inpatient Diagnosis Related Group, 1/1/2020 - 12/31/2020

DRG Description	Discharges
Vaginal delivery	218
Neonate with other significant problems	161
Alcohol/drug abuse or dependence	128
Respiratory infections & inflammations	120
Normal newborn	120
Cesarean section	111
Septicemia	90
Diabetes	87
Heart failure & shock	86
Simple pneumonia & pleurisy	84

5. Community Health Committee

The Owensboro Health Twin Lakes Medical Center Population Health Committee plays a vital role to the CHNA process. This committee was formed after the initial CHNA in 2013 with a cross section of individuals and organizations that are instrumental in working to improve the health and well-being of the community. Representatives include Grayson County Schools, Local industry, Grayson County Health Department, local government, UK Extension Service, a regional cancer coalition, hospital staff, law enforcement, Grayson County Master Gardeners, and others.

These committee members represent organizations and agencies that serve the Grayson County population in a variety of areas that relate to a population's health. By volunteering their time, the committee members enabled the hospital to acquire input from residents that are often not engaged in conversations about their health needs. The committee provides both an expert view of the needs they see while working with the people and clients they serve and in assisting in the extensive distribution of the community survey. Conducting this assessment during the COVID-19 pandemic added new challenges in accessing community input, however the population health committee was committed to the process both with promoting the survey through social media and through organization's communication channels.

CEDIK representatives attended the virtual October 2021 monthly meeting of the OH Twin Lakes Medical Center Population Health Committee to introduce the CHNA assessment process, tools and the role and responsibilities of committee members. The committee reviewed and approved the survey and the list of individuals for focus groups and key informant interviews during subsequent meetings. On April 29, 2022, the CEDIK team presented to the population health committee virtually for the reporting of survey, focus group and key informant interview results and to complete a prioritization process of the identified health needs with the goal to make recommendations to the hospital to address over the next three years.

Table 12. Owensboro Health Twin Lakes Medical Center Population Health Committee

Name	Representing Organization
Ashley Herrington	Owensboro Health Twin Lakes Medical Center, CEO
Jessica Embry	Owensboro Health Twin Lakes Medical Center, Addiction Services
Mike Petter	Owensboro Health Twin Lakes Medical Center, Controller
Andria McGregor	Owensboro Health Twin Lakes Medical Center, Marketing
Angela Gibson	Owensboro Health Twin Lakes Medical Center, Pharmacy
Brittany Clemons	Owensboro Health Twin Lakes Medical Center, Quality
Cathy Stewart	Owensboro Health Twin Lakes Medical Center, Nursing
Stacey Wilt	Owensboro Health Twin Lakes Medical Center, Outpatient Clinics
Katie Dubree	Owensboro Health Twin Lakes Medical Center, Dietician
Debbie Zuerner	Owensboro Health, Director of Community Engagement
Dr. Jim Tidwell	Owensboro Health, Vice President of Population Health
Debbie Childress	Grayson County Alliance
Natalie Taul	Grayson County Extension Office
Michele Vicent	Catholic Outreach
Wayne Meriwether	Owensboro Health Twin Lakes Medical Center, Retired CEO
Carol Meriwether	Master Gardener's Association
Joe Fowler	United Way of Central Kentucky, CEO
Joel Bernard	MidPark Industries
Joy Wickens	Passport Health Services
Doug Robinson	Grayson County Schools, Superintendent
April Spalding	Grayson County Chamber of Commerce
Jessica Kiper	Grayson County Health Department
Kristy Hodges	Grayson County Schools, Food Services
Josh Horton	Grayson County Health Department
Samara Heavrin	Kentucky State Representative
Tammee Saltsman	Leitchfield Parks & Recreation

6. Community Feedback Overview

To gather Grayson County resident feedback, OHTLMC distributed a paper and digital survey throughout the community in early 2022. CEDIK facilitated other primary data collection with focus groups and key informant interviews. Throughout the process, CEDIK made it a priority to get input from populations that are often not engaged in conversations about their health needs or gaps in service. This CHNA report synthesizes community health needs survey data, focus groups with those representing vulnerable populations and community experts through key informant interviews.

Three focus groups, with a total of twenty-three participants, were conducted virtually. Participation virtually included comments made in the chat. There was representation from a health coalition, healthcare providers, and vulnerable populations/providers for vulnerable populations. The focus groups were conducted in March of 2022. The following groups participated/were represented:

- Grayson County Extension
- Grayson County Schools
- Grayson County Alliance
- Grayson County Healthcare Foundation
- Catholic Outreach
- United Way of Central Kentucky
- Grayson County Health Department
- Banks and Businesses
- Tri-County CASA
- Owensboro Health
- Owensboro Health Twin Lakes Medical Center

Qualitative analysis of focus group responses revealed overarching themes across the focus groups. Findings across all groups consistently underscored challenging experiences that not only hindered community ability to access services, but also the need for expanded services.

The key findings from each of the 5 questions posed to the focus groups are listed below:

- The community's vision for a healthy Grayson County involves community culture, healthy lifestyles, and access to care.
- The greatest health needs in Grayson County involve chronic diseases, unhealthy behaviors, and access to care. Social determinants of health particular to Grayson County heavily impact the community's view of the greatest health needs.
- The current greater healthcare system (including hospital, health department, clinics, behavioral health, EMS, housing, and food access), is described as a system rich with resources and providers and many collaborate often, but there continues to be a need for expanded access and services.
- To better meet health needs in Grayson County, there should be a healthcare approach and a community approach.
- There were positive and negative lasting impacts of COVID-19 on the community.

7. Focus Group Findings

Finding 1: The community's vision for a healthy Grayson County involves community culture, healthy lifestyles, and access to care.

Focus group responses that contributed to this finding are listed below.

Community Culture	Healthy Lifestyles	Access to Care
<ul style="list-style-type: none">• Volunteerism• Philanthropic• Shared mission and goals among community organizations• Knowledgeable about community resources• Work is valued• Creativity is encouraged	<ul style="list-style-type: none">• Access to parks and recreation• Access to healthy food• Healthy choices• Reduced tobacco use and vaping• Reduced obesity and heart disease	<ul style="list-style-type: none">• Primary care• Addiction rehab• Community Health Workers• Transportation

Finding 2: The greatest health needs in Grayson County involve chronic diseases, unhealthy behaviors, and access to care. Social determinants of health particular to Grayson County heavily impact the community's view of the greatest health needs.

Focus group responses that contributed to this finding are listed below.

Chronic Diseases	Unhealthy Behaviors	Access to Care
<ul style="list-style-type: none">• Obesity in adults and children• Heart disease• Diabetes• Lung diseases• Substance Use Disorder	<ul style="list-style-type: none">• Substance use• Tobacco use• Vaping• Poor food choices• Child abuse	<ul style="list-style-type: none">• Primary care• Addiction treatment• Tools for Sober Living for people ages 16-55• Mental health services for adults and youth• Hearing and vision care for the elderly• Transportation• Dentists that accept Medicaid patients• Lack knowledge of available resources

Social determinants of health particular to Grayson County that impact the greatest health needs in the community are:

Food Insecurity

There are many reasons for food insecurity in the community. Children are particularly susceptible to food insecurity when away from the school system. Lack of healthy food options, and barriers such as cost and education on how to prepare healthy foods impacts community members.

Childcare

There is a current shortage of affordable childcare available in the community.

Housing

Homelessness is an issue. There is a need for quality, safe housing for all income brackets in Grayson County.

Transportation

Transportation to and from essential services, including healthcare is a barrier for people.

Economic Needs

The community is in need of economic development regarding workforce training and financial literacy to combat poverty in the area.

Finding 3: The current greater healthcare system (including hospital, health department, clinics, behavioral health, EMS, housing, and food access), is described as a system rich with resources and providers and many collaborate often, but there continues to be a need for expanded access and services.

Focus group responses that contributed to this finding are listed below.

Opportunities for System

- Transportation
- Housing
 - Lack of rental properties available, especially low-income housing
 - Low standard of living for housing
 - Struggle to find rental units is a cultural issue, generational differences lead to differing expectations
 - Increase affordable housing
- Continue to grow collaboration efforts between organizations (in part due to COVID)
- Dental care for Medicaid/Medicare patients
- Vision care
- Hearing care, not being able to hear can lead to isolation in patients
- Availability of primary care
- Financial literacy training such as how to allocate funds or budgeting for success
- Awareness of opportunities available such as employment opportunities and work ready training

Strengths of System

- Organizations work together
- OH Owensboro Health Twin Lakes Medical Center
- Quality of ultrasounds, radiology, imaging services are high and available here
- Good trauma level hospital within reach
- Health Department
- EMS services

Finding 4: To better meet health needs in Grayson County, there should be a healthcare approach and a community approach.

Focus group responses that contributed to this finding are listed below.

Healthcare Approach

- Healthcare providers screening for food insecurity
- Nurse/nutritionist/health coach liaison for primary care (diabetes and other chronic diseases)
- Recruit and retain more primary care providers
- Lower barriers to care (healthcare located at factories, senior centers)
- Transportation voucher for community
- Policy changes for public health issues
 - e.g. smoking, county wide smoke free ordinance

Community Approach

- Increasing collaboration among community organizations
 - Beyond sharing what each other is doing, Holistic approach
 - Community resource navigator- connect community members to resources they need
- Evidence based long term addiction services- long term recovery housing, resources, services, being work ready
- Community peer support specialists
 - Addiction
 - Poverty
- Community culture change towards making healthy choices (school children choosing healthy foods)
- Sports complex that provides opportunities for recreation outside of school, organized sports (sports in middle school)
- Extension programming is “meeting people where they’re at”
 - Financial literacy education
 - Nutrition

Finding 5: There were positive and negative lasting impacts of COVID-19 on the community.

Focus group responses that contributed to this finding are listed below.

Positives

- Organizations adapting different avenues to make programming more accessible
- Tore down red tape for some mental health resources (COVID created that platform for children)
- Proud of how community responded, people stepped up to help
 - Collaborations are here
 - When we know the emergency exists, we respond
- We learned to slow down
- Highlighted importance of relationships and people
- Organizations and businesses forced to think outside of the box, positive things that came out of that
- Discovered new and different ways of reaching audiences (old and new audiences)

Negatives

- Struggle to get people reengaged
- Culture of community has been impacted by differing opinions related to COVID,
 - e.g. politics and public health workforce shortage
- Supply chain disturbance
- Delay in healthcare which caused some people to miss routine, preventative healthcare
- COVID long haulers and unknown impacts
- Long wait lists for childcare
- Mental health issues have increased
 - Wait times for care increased as well
- Nursing shortage leading to limited services

8. Key Informant Interviews

Owensboro Health Twin Lakes Medical Center leadership provided a list of potential community stakeholders or healthcare providers considered potential contacts for key informant interviews to provide a deeper understanding of health needs in the community. In total, four key informant interviews were completed representing specialists or providers in the identified need areas. Responses are summarized below. Key informants were asked to discuss the quality of life in their community, explain their understanding of the most common health needs, give their perception of the current healthcare system, and provide suggestions on how to better meet the health needs in the community.

Participants:

- Jason Woosley, Grayson County Jailer
- Lisa Skaggs, Wilkey Elementary School Principal
- Sue Greenwell, Lincoln Trail Area for Aging and District Development
- Laura Jessie, Owensboro Health Twin Lakes Medical Center Social Services

Quality of Life

Key informants reported that the quality of life in Grayson County is “normal” for “average” community members, but can be very low for vulnerable populations, such as children, the elderly, and individuals with lower income.

Most Common Health Needs

Access to Care

When asked about health needs in Grayson County, all key informants referenced access to care. Residents of Grayson County face many barriers to care. Transportation to essential services, including traveling outside of the community for care keeps some patients from accessing the healthcare they need. Key informants referenced specialties such as orthopedic care, pulmonology, cardiology, internal medicine, nephrology as reasons why some travel outside of the community for care. Other barriers such as the high cost of healthcare and medications impact some community members. There is a significant need for dentists that accept Medicaid insurance. One key informant said that high turnover in providers makes it difficult for patients to establish a relationship with their physician, which is important for successful and effective primary care.

Food insecurity was mentioned by a key informant as a pressing health need. Many children and youth still in school receive their only meals while at school. Another key informant mentioned that there are many services in the community aimed at addressing food insecurity but the stigma associated with accessing that service prevents many from utilizing it.

Housing

There is not enough safe, adequate, and affordable housing available in Grayson County. Key informants referenced that many people “couch surf” or stay with family members because they cannot afford housing.

Mental Health

There is a high need for mental health providers in Grayson County. Many people must travel outside of the community for mental health care, which leaves some patients unable to access care. A key informant said mental health is “lacking everywhere” and noted that many in the community suffer from both mental health issues and abusing substances.

Children and youth are a particularly vulnerable population concerning mental health and access to mental health treatment. Many students rely on counseling services provided by the school system. There is a high number of students that have identified Adverse Childhood Experiences (ACEs) and this contributes towards unstable mental health. Many children currently living in poverty struggle with mental health and have limited resources.

The lack of available care and the stigma associated with mental health keep many who need services from accessing them.

Substance Use and Issues Caused by SUD

Most key informants referenced substance use as a health issue, but mainly spoke about the other issues that arise when there is a high incidence of substance abuse in the community. Particularly how substance use impacts a community. There are many children being raised by people other than their parents. Grandchildren raising grandchildren face many barriers, including understanding and navigating the healthcare system, school system, and other necessary resources, like the internet. Adverse Childhood Experiences (ACEs) involved with being around substances and individuals suffering from substance use disorders impacts children’s development and resiliency. A key informant noted that there is a high incidence of animal cruelty, vulnerable adult and child abuse in the community and related that back to substance use.

Community Issues

One key informant said that the community is in need of economic development regarding new businesses and jobs with a living wage that can provide insurance. Another key informant noted that there are high rates of poverty and symptoms related to poverty in Grayson County.

Perception of Healthcare System

When asked about their perception of the current healthcare system (described as hospital, health department, clinics, behavioral health, EMS, housing, and food access), key informants were generally positive about the healthcare system available to residents of Grayson County. Responses are categorized below as identified strengths of the system and identified opportunities for the system.

Identified Strengths

- Collaborative organizations
- Owensboro Health is a tenet in the community
 - OH is a strong employer
 - OH is community informed
- There is a high quality of care available
- Supportive environment for families with loved ones in prison system

Identified Opportunities

- More healthcare/ health education available in school system, make families aware of health services available in Grayson County
- Indoor recreation opportunities
- Expanding services such as EMS would benefit the community

How to Better Meet Health Needs

Key informants shared ways to meet the health needs in Grayson County. Their suggestions on how to meet the health needs discussed above are listed here:

- Expanding available services
 - EMS
 - After hours care
 - Services at school system
 - Specialty care
 - Substance Use Treatment
 - Mental health
 - Dental care
 - Dentists that accept Medicaid
 - Dental care for children/youth
- Communication about available services
 - Advertising and promoting services
 - Providing information on available services at community events

8. Community Survey Results

CEDIK assisted OHTLMC in developing a survey to gather health information and opinions of Grayson County residents 18 and older. The survey was conducted in February and March 2022 using an online survey tool and by distributing printed copies in various locations throughout the community. The online survey was promoted through newspaper stories, emails, and on the OHTLMC Facebook page. Emails with a link to the survey were sent to Chamber of Commerce members, local industries, and employees of the school system and the hospital. Printed copies were delivered to [list locations here]...

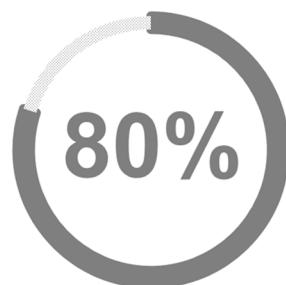
1,109 Grayson County residents participated in the survey. There were three primary categories of questions on the survey; demographics, personal health information, and perceived health needs of the community.

Owensboro Health Twin Lakes Medical Center Survey Results

WINTER 2022

Respondent Demographics

**1,109
Respondents**



Respondents are female.

*Additional responses:
Male (20%), Other (0.7%)*



Respondents are white.

Additional responses: African American/Black (0.2%), Asian/Pacific Islander (0.3%), Hispanic/Latino (0.2%), Native American (1.1%).

Age group of respondents

18-24	7%
25-39	26%
40-54	31%
55-64	20%
65-69	7%
70 or older	9%

Educational attainment of respondents

College or above	48%
High School	30%
Technical school	19%
Other	4%

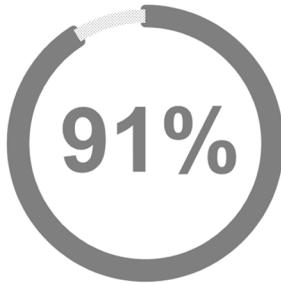
Income level of respondents

\$0-\$24,999	18%
\$25,000-\$49,999	23%
\$50,000-\$74,999	19%
\$75,000-\$99,999	14%
\$100,000 or more	14%
Prefer not to answer	11%

Employment status of respondents

Employed full-time	60%
Retired	19%
Unemployed	6%
Employed part-time	8%
Student	3%
Other	4%

Where respondents go for routine healthcare:



Go to a provider's office for their routine healthcare.

Respondents also use these options:

Emergency Room	2%
Urgent Care	2%
Health Department	3%
Do not receive routine healthcare	1%
Other	2%

Reasons why respondents do not receive routine healthcare:



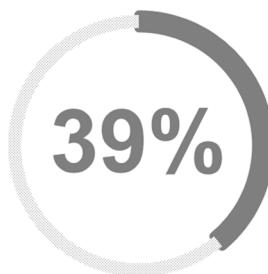
Respondents that said they did not receive routine healthcare in the question above, 21% cannot afford it.

Respondents identified the following:

No appointment available	11%
Lack of providers in my community	26%
No transportation	2%
Cannot take off from work	17%
Cannot afford it	21%
Other	23%

Other responses: go only when needed, no provider, too long to get an appointment

Transportation to healthcare:



Travel 20 miles or more to see a specialist.

Respondents chose from these options:

Less than 20 miles	35%
20-49 miles	31%
50-100 miles	6%
More than 100 miles	2%
I do not see any specialists	27%

96% of respondents use their own vehicle, while 4% travel in a friend/family vehicle.

The top three health challenges respondent households face:

Respiratory/lung disease	24%
Mental health issues	16%
Diabetes	15%
Substance use	11%
Heart disease and stroke	10%
High blood pressure	8%
Cancer	6%
HIV/AIDS/Sexually Transmitted Infections	1%
Overweight/obesity	0%
Other	8%
<i>Arthritis, thyroid issues, allergies, anxiety/depression, kidney disease, autoimmune disease</i>	

Respondent household eligibility:

Medicare	30%
Medicaid	23%
Public Housing Assistance	1%
SNAP (Food stamp program)	11%
VA	6%
Commercial/private insurance	30%

The top three risky behaviors seen most in the community:

Drug abuse	20%
Alcohol abuse	14%
Prescription drug misuse	13%
Overweight	13%
Tobacco use	12%
Lack of access to healthy food	8%
Poor eating habits	7%
Lack of exercise	6%
Unsafe sex	3%
Dropping out of school	3%

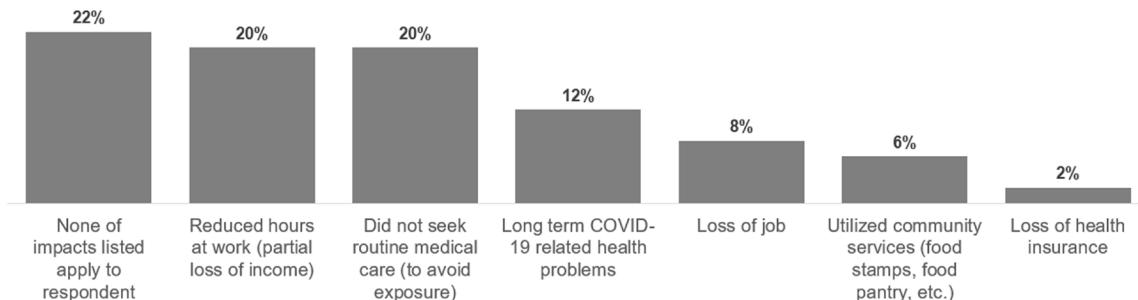
34%

Respondent households have delayed healthcare because of lack of money and/or insurance.

8%

Respondent households currently without health insurance.

Respondent household impacts due to COVID-19 pandemic:



Respondents identified another 10% of impacts due to COVID-19: social isolation/stress/depression, loss of family/friend, mental health decline, overworked/exhaustion

The top three most important factors for a healthy community:

Low crime/safe neighborhood	15%
Good place to raise children	13%
Good school systems	13%
Easy access to healthcare	13%
Good jobs/healthy economy	13%
Religious or spiritual values	8%
Affordable housing	6%
Personal responsibility	6%
Community activities and events	4%
Transportation	3%
Low disease rate	2%
Parks and recreation	2%
Diverse community	1%
Excellent race relations	0.4%



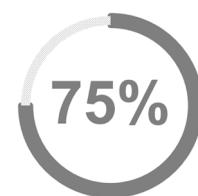
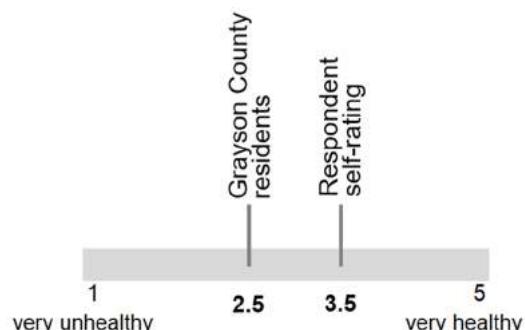
Respondents think Grayson County has the above factors for a healthy community.

Places respondents purchase fruits and vegetables:

Farmer's Market/local grower	33%
Small convenience store/gas station	1%
Small retail stores (e.g. Dollar General)	7%
Large retail stores (e.g. Walmart)	55%
Other	3%

Amish farms, grow my own/garden, other stores not listed

Respondents rate their own health, and the overall health of their community:

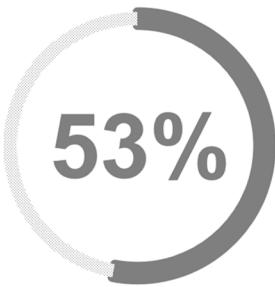


Respondents are satisfied with the ability to access healthcare services in Grayson County.

Reasons why respondents do not eat AMA daily recommended minimum fruits and vegetables:

Cost	36%
Limited options available	20%
Do not like taste of fruits and vegetables	15%
Lack of access to fruits and vegetables	10%
Lack of knowledge on how to prepare fruits and vegetables	7%
Other	11%
<i>Lack of time, preference/lazy, upsets stomach, too expensive</i>	

Where respondents go for routine healthcare:



Respondent households that struggle with mental health issues.
77% have sought treatment.

Respondent reasons for not seeking treatment:

Embarrassed to ask for help	34%
Treatment not covered by insurance	26%
Not sure where to access treatment	26%
Unable to get an appointment	9%
Lack of transportation to services	4%

What types of treatment/support have you used for substance use disorders in the past 12 months?

Primary care provider	11%
Counselor/therapist	5%
Psychiatrist/Psychologist	2%
Alcoholics/Narcotics Anonymous	1%
Emergency department	1%
Medication Assisted Treatment (MAT)	1%
Faith based leader/program	1%
Support group	1%
Certified peer support specialist	0%
I have not needed to use treatment or support for substance use disorder	72%
Other	4%

Long term treatment, Therapy and psychiatry, No treatment available

Selected Priority Areas

CEDIK reviewed findings from the community surveys, focus groups, key informant interviews and county specific secondary health data.

The process of priority selection followed the Association for Community Health Improvement (ACHI) recommendations to consider:

1. Magnitude and severity of the problem
2. Need among vulnerable populations
3. Community's capacity and willingness to act on the issue
4. Ability to have a measurable impact on the issue
5. Availability of hospital and community resources
6. Existing interventions focused on the issue
7. Whether the issue is a root cause of other problems
8. Trending health concerns in the community

Additional prioritization criteria can include: the importance of each problem to community members, evidence that an intervention can change the problem, and alignment with an organization.

CEDIK staff led a facilitated discussion with members of the steering committee after the data presentation and completed the process of prioritizing the identified health needs. The following represent the recommendations of the population health committee to Owensboro Health Twin Lakes Medical Center for addressing health needs in Grayson County and the hospital service area for the next three years.

Prioritized Needs

9. Address Chronic Health Conditions
10. Address Obesity/Physical Inactivity
11. Address Mental Health
12. Address Substance Abuse

Conclusion

Grayson County is a community with many assets, with a caring community spirit being an important driver in the approach to community health improvements through collaborative efforts. While there are many areas of need in the county, this report identifies priority areas that Owensboro Health Twin Lakes Medical Center will use for guidance in planning its community benefit efforts and strategic direction for addressing community health needs. Further investigation may be necessary for determining and implementing the most effective interventions.

An implementation strategy will be developed and approved within five months of the approval of the CHNA; periodic evaluation of goals/objectives for each identified priority will be conducted to assure that progress is on track per the implementation plan.

Community feedback to the report is an important step in the process of improving community health. Please send your comments to Ashley Herrington, OH Owensboro Health Twin Lakes Medical Center CEO.

Email: ashley.herrington@owensborohealth.org

Appendix

- A. County Health Rankings Data Sources
- B. Owensboro Health Twin Lakes Medical Center CHNA Survey
- C. Grayson County Community Resources

2021 Secondary Data Sources

Population		Source	Years of Data
2019 Population	Total Population	Census Population Estimates	2019
Under 18 years	Percent of Population 18 years of age	Census Population Estimates	2019
65 years and older	Percent of Population 65 and older	Census Population Estimates	2019
Non-Hispanic Black	Percent of Population Non-Hispanic Black	Census Population Estimates	2019
American Indian & Alaska Native	Percent of Population American Indian & Alaska Native	Census Population Estimates	2019
Asian	Percent of Population Asian	Census Population Estimates	2019
Native Hawaiian/Other Pacific Islander	Percent of Population Native Hawaiian/Other Pacific Islander	Census Population Estimates	2019
Hispanic	Percent of Population Hispanic	Census Population Estimates	2019
Non-Hispanic White	Percent of Population Non-Hispanic White	Census Population Estimates	2019
Not Proficient in English	Percent of Population not Proficient in English	American Community Survey, 5-year estimates	2015-2019
Female	Percent of Population Female	Census Population Estimates	2019
Rural	Percent of Population Rural	Census Population Estimates	2010

Health Outcomes			
Premature death	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	National Center for Health Statistics - Mortality Files	2017-2019
Poor or fair health	Percentage of adults reporting fair or poor health (age-adjusted).	Behavioral Risk Factor Surveillance System	2018
Poor physical health days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	Behavioral Risk Factor Surveillance System	2018
Poor mental health days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	Behavioral Risk Factor Surveillance System	2018
Low birthweight	Percentage of live births with low birthweight (< 2,500 grams).	National Center for Health Statistics - Natality files	2013-2019

2021 Secondary Data Sources, continued

Health Behaviors		Source	Years of Data
Adult smoking	Percentage of adults who are current smokers (age-adjusted).	Behavioral Risk Factor Surveillance System	2018
Adult obesity	Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m ² .	United States Diabetes Surveillance System	2017
Food environment index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	USDA Food Environment Atlas, Map the Meal Gap from Feeding America	2015 & 2018
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity.	United States Diabetes Surveillance System	2017
Percent with Access to Exercise Opportunities	Percentage of population with access to exercise opportunities.	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	2010 & 2019
Excessive drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	Behavioral Risk Factor Surveillance System	2018
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement.	Fatality Analysis Reporting System	2015-2019
Fatal overdoses	Fatal overdoses from any drug, rate per 100,000 population.	Kentucky Injury Prevention and Research Center	2020
Non-fatal overdoses	Non-fatal overdoses - ED visits, rate per 100,000 population.	Kentucky Injury Prevention and Research Center	2020
SUD diagnoses	SUD diagnosis - ED visits, rate per 100,000 population.	Kentucky Injury Prevention and Research Center	2020
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2018
Teen births	Number of births per 1,000 female population ages 15-19.	National Center for Health Statistics - Natality files	2013-2019
Access to Care			
Access to Care	Uninsured	Small Area Health Insurance Estimates	2018
	Primary care physicians	Area Health Resource File/American Medical Association	2018
	Dentists	Area Health Resource File/National Provider Identification file	2019
Mental health providers	Mental health providers	CMS, National Provider Identification	2020

2021 Secondary Data Sources, continued

		Years of Data
		Source
Social & Economic Factors		
Education	High school completion	American Community Survey, 5-year estimates 2015-2019
	Some college	American Community Survey, 5-year estimates 2015-2019
Employment	Unemployment	Bureau of Labor Statistics 2019
Income	Children in poverty	Small Area Income and Poverty Estimates 2019
	Income inequality	American Community Survey, 5-year estimates 2015-2019
Family and Social Support	Children in single-parent households	American Community Survey, 5-year estimates 2015-2019
	Social associations	County Business Patterns 2018
Community Safety	Violent crime	Uniform Crime Reporting - FBI 2014 & 2016
	Injury deaths	National Center for Health Statistics - Mortality Files 2015-2019

		Physical Environment
		Source
Environmental Quality		Environmental Public Health Tracking Network 2016
	Air pollution - particulate matter	
	Drinking water violations	Safe Drinking Water Information System 2019
Housing and Transit		Comprehensive Housing Affordability Strategy (CHAS) data 2013-2017
	Severe housing problems	
	Driving alone to work	American Community Survey, 5-year estimates 2015-2019
	Long commute - driving alone	American Community Survey, 5-year estimates 2015-2019

2016-2020 County Health Rankings Data Sources

Health Outcomes	Source	2016 Data		2020 Data	
		2011-2013	2016-2018	2011-2013	2016-2018
Premature death	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	National Center for Health Statistics - Mortality Files			
Poor or fair health	Percentage of adults reporting fair or poor health (age-adjusted).	Behavioral Risk Factor Surveillance System	2014	2017	
Poor physical health days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	Behavioral Risk Factor Surveillance System	2014	2017	
Poor mental health days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	Behavioral Risk Factor Surveillance System	2014	2017	
Low birthweight	Percentage of live births with low birthweight (< 2,500 grams).	National Center for Health Statistics - Natality files	2007-2013	2012-2018	
Health Behaviors					
Adult smoking	Percentage of adults who are current smokers (age-adjusted).	Behavioral Risk Factor Surveillance System	2014	2017	
Adult obesity	Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m ² .	CDC Diabetes Interactive Atlas, United States Diabetes Surveillance System	2012	2016	
Food environment index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	USDA Food Environment Atlas, Map the Meal Gap from Feeding America	2013	2015 & 2017	
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity.	CDC Diabetes Interactive Atlas, United States Diabetes Surveillance System	2012	2016	
Excessive drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	Behavioral Risk Factor Surveillance System	2014	2017	
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement.	Fatality Analysis Reporting System	2010-2014	2014-2018	
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2013	2017	
Teen births	Number of births per 1,000 female population ages 15-19.	National Center for Health Statistics - Natality files	2007-2013	2012-2018	

2016-2020 County Health Rankings Data Sources, continued

Access to Care		Source	2016 Data		2020 Data	
Access to Care	Uninsured	Small Area Health Insurance Estimates	2013	2017		
Primary care physicians		Area Health Resource File/American Medical Association	2013	2017		
Dentists		Area Health Resource File/National Provider Identification file	2014	2018		
Mental health providers	Mental health providers	CMS, National Provider Identification	2015	2019		
Social & Economic Factors						
Education	High school completion	EDFacts, KY & WV Departments of Education	2012-2013	2016-2017		
	Some college	American Community Survey, 5-year estimates	2010-2014	2014-2018		
Employment	Unemployment	Bureau of Labor Statistics	2014	2018		
Income	Children in poverty	Small Area Income and Poverty Estimates	2014	2018		
Family and Social Support	Children in single-parent households	American Community Survey, 5-year estimates	2010-2014	2014-2018		
	Social associations	County Business Patterns	2013	2017		
Community Safety	Violent crime	Uniform Crime Reporting - FBI	2010 & 2012	2014 & 2016		
	Injury deaths	CDC WONDER Mortality data, National Center for Health Statistics - Mortality Files	2009-2013	2014-2018		
Physical Environment						
Environmental Quality	Air pollution - particulate matter	CDC WONDER Environmental data, Environmental Public Health Tracking Network	2011	2014		
Housing and Transit	Severe housing problems	Comprehensive Housing Affordability Strategy (CHAS) data	2008-2012	2012-2016		
	Driving alone to work	American Community Survey, 5-year estimates	2010-2014	2014-2018		
	Long commute - driving alone	American Community Survey, 5-year estimates	2010-2014	2014-2018		

OH Twin Lakes 2022 CHNA Survey

We want to better understand your health needs and how the hospital and its partners can better meet those needs. Please take 5-10 minutes to fill out this survey. Please do not include your name anywhere.

All responses will remain anonymous.

Q1. Please tell us your zip code:

Q2. Are you or anyone in your household satisfied with the ability to access health care services in Grayson County?

- Yes
- No

Q3. Where do you or anyone in your household go for routine healthcare such as annual checkups and wellness exams? Select all that apply.

- Provider's office
- Emergency room
- Health department
- Urgent care center
- I do not receive routine healthcare
- Other. Please specify:

Q4. If you answered ***I do not receive routine healthcare*** to the previous question, please select all that apply as to why:

- No appointment available
- Lack of providers in my community
- No transportation
- Cannot take off work
- Cannot afford it
- Other. Please specify:

Q5. How far do you or anyone in your household travel to see a healthcare specialist?

- Less than 20 miles
- 20 - 49 miles
- 50 - 100 miles
- More than 100 miles
- I do not see any specialists

Q6. What do you or anyone in your household use for transportation?

- My own vehicle
- Family/friend vehicle
- CATS/other transportation service
- Taxi/cab
- Other. Please specify:

Q7. Please select the TOP THREE **health challenges** you or anyone in your household face. Select only three.

- Cancer
- Diabetes
- Mental health issues
- Heart disease and stroke
- High blood pressure
- Substance use
- HIV/AIDS/Sexually Transmitted Infections
- Overweight/obesity
- Respiratory/lung disease
- Other. Please specify:

Q8. Please select the TOP THREE **risky behaviors** you see most in your community. Select only three.

- Alcohol abuse
- Tobacco use
- Unsafe sex
- Prescription drug misuse
- Overweight
- Poor eating habits
- Lack of exercise
- Lack of access to healthy food
- Dropping out of school
- Drug abuse
- Other. Please specify:

Q9. Are you or anyone in your household without health insurance currently?

- Yes
- No

Q10. Have you or anyone in your household delayed healthcare due to lack of money and/or insurance?

- Yes
- No

Q11. Are you or anyone in your household currently eligible for any of the following? Select all that apply.

- Medicare
- Medicaid
- Public housing assistance
- SNAP (Food stamp program)
- Veteran Affairs
- Commercial/private insurance

Q12. How would you rate your own personal health?

- Very healthy
- Healthy
- Neither healthy nor unhealthy
- Unhealthy
- Very unhealthy

Q13. How would you rate the overall **health of Grayson County?**

- Very healthy
- Healthy
- Neither healthy nor unhealthy
- Unhealthy
- Very unhealthy

Q14. Please select what you would consider the TOP THREE most important factors for a **healthy community**. Select only three:

- Good place to raise children
- Low crime/safe neighborhood
- Good school systems
- Easy to access healthcare
- Community activities and events
- Affordable housing
- Low disease rate
- Personal responsibility
- Excellent race relations
- Diverse community
- Good jobs/healthy economy
- Religious or spiritual values
- Transportation
- Parks and recreation
- Other. Please specify: _____

Q15. Do you think Grayson County meets the factors you selected in question 14?

- Yes
- No

Q16. What could be done in Grayson County to better meet your health needs?

Q17. According to American Heart Association, a person should eat a minimum of 5 servings of fruits and vegetables (2 fruit and 3 vegetables) daily. If you do not eat the minimum recommended servings of fruits and vegetables daily, what are the reasons?

Select all that apply.

- Lack of access to fruits and vegetables
 - Cost
 - Lack of knowledge on how to prepare fruits and vegetables
 - Limited options available
 - Do not like taste of fruits and vegetables
 - Other. Please specify:
-

Q18. Where do you or others in the community purchase fruits and vegetables?
Select all that apply.

- Farmer's market/local grower
 - Small convenience store/gas station
 - Small retail stores (ex. Dollar General)
 - Large retail stores (ex. Walmart, IGA, Save-a-lot, etc.)
 - Other. Please specify:
-

Q19. Do you or anyone in your household struggle with mental health issues such as anxiety, depression, bipolar disorder, schizophrenia, multiple personality disorder, PTSD, substance use disorder, etc.?

- Yes
- No (skip to question 22)

Q20. If you answered yes to question 19, did you or your householder seek treatment?

- Yes (skip to question 22)
- No

Q21. If you answered no to question 20, what was the reason? Select all that apply.

- Unable to get an appointment
- Treatment not covered by insurance
- Embarrassed to ask for help
- Not sure where to access treatment
- Lack of transportation to services

Q22. What type of treatment and/or support have you used for substance use disorders in the past 12 months? Select all that apply.

- Alcoholics/Narcotics Anonymous
- Counselor/therapist
- Emergency department
- Medication Assisted Treatment (MAT)
- Certified peer support specialist
- Primary care provider
- Psychiatrist/Psychologist
- Faith based leader/program
- Support group
- I have not needed to use treatment or support for substance use disorder
- Other. Please specify:

Q23. In what ways were you or your family affected by the COVID-19 pandemic? Select all that apply.

- Loss of job
 - Loss of health insurance
 - Reduced hours at work (partial loss of income)
 - Utilized community services (food stamps, food pantry, etc.)
 - Did not seek routine medical care (to avoid exposure)
 - Long term COVID-19 related health problems
 - Other. Please specify:

- None of the above

Q24. What is your age?

- 18 - 24
- 25 - 39
- 40 - 54
- 55 - 64
- 65 - 69
- 70 or older

Q25. What is your gender?

- Male
- Female
- Other _____
- Prefer not to answer

Q26. What ethnic group do you identify with?

- African American/Black
- Asian/Pacific Islander
- Hispanic/Latino
- Native American
- White/Caucasian
- Other. Please specify:

Q27. What is the highest level of education you have completed?

- High School/GED
 - Technical school
 - College or above
 - Other. Please specify:
-

Q28. What is your annual household income?

- \$0 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 or more
- Prefer not to answer

Q29. What is your current employment status?

- Unemployed
 - Employed part-time
 - Employed full-time
 - Retired
 - Student
 - Other. Please specify:
-

Grayson County Community Resources

1. United Way of Central Kentucky 211 Resource:
<http://www.navigateresources.net/uwcky/>
2. Credible Mind, Owensboro Health and RiverValley Behavioral Health Community Resources and Platform App:
<https://healthymind.crediblemind.com/user-resources>

Approval

This Community Health Needs Assessment was approved by the Owensboro Health, Inc. Board of Trustees on May 23, 2022.