Owensboro Health Regional Hospital

Community Health Needs Assessment

incorporating the findings of the 2015 Green River District Health Department CHA, CHIP, and Vulnerable Populations Addendum

Owensboro Health

— Approved May 19, 2016 —

Table of Contents

Tables

Figures

Executive Summary

Owensboro Health Regional Hospital (OHRH) is pleased to present its 2015-2018 Community Health Needs Assessment (CHNA). This CHNA report builds on existing community health assessment and planning efforts in Daviess County and its surrounding areas and provides an overview of the health needs and priorities within the county. OHRH partnered with Xerox Community Health Solutions to synthesize findings relevant to Daviess County from the Green River District Health Department's (GRDHD's) Mobilizing for Action through Planning and Partnerships (MAPP) assessments, along with additional Daviess County primary data collected through key informant interviews. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services and input from the community. The goal of this report is to equip readers with a deeper understanding of the health needs in their community, as well as help guide OHRH in its community benefit planning efforts and development of an implementation strategy to address prioritized needs. The Owensboro Health, Inc. Board of Directors approved this CHNA on May 19, 2016.

Summary of Findings

Methodology

GRDHD engaged OHRH and Daviess County community members in completing the 2015 GRDHD Community Health Assessment (CHA), 2015 Vulnerable Communities Addendum, and 2015-2018 Community Health Improvement Plan (CHIP), which are available at http://www.healthdepartment.org/CHACHIP.htm.

While GRDHD'S MAPP assessment and planning process produced many findings on community health in Daviess County, additional insights into the county's health needs and strengths were collected to provide a better understanding of the local context. Xerox Community Health Solutions conducted eight key informant interviews to probe more deeply into health and quality of life themes within the county. Community resources were also identified in these interviews.

This CHNA report synthesizes key informant interview data with findings from the GRDHD CHA, Vulnerable Communities Addendum and CHIP reports.

MAPP Assessments

Visioning: Daviess County community members described their ideal community as one in which the environment is respected and its impacts on personal, community and mental health are acknowledged. In addition, the community wished to see better access to affordable healthcare and more awareness of healthcare resources.

Community Health Status Assessment: Secondary data from state and national sources were assessed to identify concerns in the following areas:

- Access to Health Services

- Clinical Preventative Services
- Environmental Quality
- Injury & Violence
- Maternal, Infant, and Child Health
- Mental Health
- Nutrition, Physical Activity, Obesity
- Oral Health
- Reproductive and Sexual Health
- Social Determinants
- Substance Abuse
- Tobacco

Community Themes and Strengths: Through a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, Daviess County residents identified common themes in their community. Strengths included both healthcare assets (health department, hospital and free dental clinics) and community assets (faith-based community, physical activity offerings, and parks and recreation centers). The prevalence of fast food outlets and challenges faced by new residents when moving into the community were identified as weaknesses. A number of opportunities were highlighted, including economic and job opportunities, access to care, partnerships and resources. Threats were centered on language and cultural barriers, the rise of poverty and homelessness and other financial and economic concerns.

Forces of Change: Community members identified the following forces of change impacting community health, with economic and social factors exerting the greatest influence:

- Cultural diversity (Burmese, Hispanic)
- Aggressive/Innovative to keep business
- Affordable Care Act
- Aging population base
- Natural disasters (ice storm, windstorm, tornado)
- Loss of coal
- Increase in single parent family home
- E-Cigarettes
- Brain drain

Local Public Health System Assessment: The Core Public Health Steering Committee developed the 10 Essential Public Health Services (EPHS) in 1994 as a framework of health activities that should be undertaken in all communities. The 10 EPHS serve as a guideline for what is commonly described as the “Public Health System” of a community. Of the 10 EPHS, four stood out as strengths within Daviess County:

- EPHS #3: Inform/Educate and Empower People about Health
- EPHS #4: Mobilize Community Partnerships
- EPHS #7: Link to Health
- EPHS #9: Evaluate

Two of the 10 EPHS were cited as weaknesses:

- EPHS #2: Diagnose and Investigate Health Problems
- EPHS #10: Research

Vulnerable Population Focus Groups

The GRDHD conducted focus groups with identified vulnerable populations in Daviess County to deepen the understanding of their health challenges. Focus group discussions and surveys revealed unmet needs across the low-income, homeless, refugee/immigrant and Hispanic/Latino populations. Common concerns across the vulnerable populations include access to healthcare and jobs, affordability of activities and resources and transportation. Most participants did not have a primary care provider. The language and health literacy barriers facing the refugee/immigrant populations are especially concerning. When asked to self-assess their general health, the homeless and refugee groups reported much poorer health status than the other vulnerable groups and the county as a whole.

Key Informant Testimony

OHRH and Xerox Community Health Solutions obtained additional primary data through eight supplemental interviews with individuals knowledgeable about health and quality of life needs in Daviess County. These key informants identified a number of concerns in the community:

The following issues were identified as the greatest health challenges:

- Access to health services, encompassing language and cultural barriers
- Substance abuse
- Low-income/underserved populations and economy
- Exercise, nutrition, and weight
- Mental health and mental disorders
- Transportation
- Health education

Prioritized Areas

To select health areas to prioritize, Daviess County community members reviewed primary and secondary data, considered existing state and national priorities, conducted open discussion

and voted on specific strategic initiatives for the county.

Daviess County selected the following priority areas for action:

- Substance abuse
- Obesity
- Access to care

In addition, mental health and oral health were identified as growing concerns. The community decided to incorporate methods of addressing these two areas into ongoing initiatives, rather than focus on them separately.

A plan for addressing these priority areas will be described in OHRH's 2016 Implementation Strategy report.

Acknowledgements

This Community Health Needs Assessment builds on the community health improvement efforts of the Green River District Health Department (GRDHD) and all community members who participated in the GRDHD assessment and planning activities.

Eight key informants shared their time and expertise to provide additional insights on strengths and needs with Daviess County:

- Dr. Nick Brake
- Deborah Fillman
- Jeff Jones
- Robyn Mattingly
- Dr. Paula McCaghren
- Dr. Khanh Nguyen
- Major Brock Peterson
- Dr. Brandon Taylor

Xerox Community Health Solutions (CHS), formerly Healthy Communities Institute, provided assistance with the collection and analysis of primary key informant data and compilation of this analysis with GRDHD reports.

OHRH would like to thank the GRDHD, all community partners, and key informants for their contributions to the information compiled in this document.

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. OHRH has produced this CHNA to meet requirements of the Affordable Care Act. The results are meant to guide OHRH 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 May 19, 2016.

1.2 Owensboro Health Regional Hospital (OHRH)

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 Regional Hospital. OHRH is nationally recognized for design, architecture and engineering, and is the only hospital in the world to be designated a Signature Sanctuary by Audubon International. OHRH is affiliated with Owensboro Health Muhlenberg Community Hospital, the One 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. As the largest employer west of Louisville, Owensboro Health has 4,088 employees and in FY 2015 saw 18,380 inpatient admissions and 823,072 outpatient encounters. A committed community partner, OHRH provided grants of $702,924 in the last year to health, social service, education and arts agencies across the region. For more information, visit owensborohealth.org.

1.3 OHRH Defined Community

For the purposes of its CHNA, OHRH has defined community as its primary service area, Daviess County, Kentucky. Daviess County will serve as the unit of analysis for this CHNA, and health needs discussed will pertain to residents of Daviess County.

2 Evaluation of Progress Since Prior CHNA

An important component of the CHNA is to evaluate the impact of the actions taken to address the significant health needs identified in OHRH's previous CHNA report. In doing so, the hospital examined what, as a system, it has done to impact each of the three priority health areas named in the previous health needs assessment, as well as how it has impacted the additional areas of concern that emerged through data analysis.

2.1 Prioritized Areas for Action, 2012-2015

DEFINED COMMUNITY: DAVIESS COUNTY

Areas of Need Prioritized by Community in the assessment period:

June 1, 2012- May 31, 2015:

Daviess County prioritized the following areas of community need through the community-wide Mobilizing for Action through Planning and Partnerships (MAPP) process led by the Green River District Health Department (GRDHD):

1. Substance Abuse (ATOD: Alcohol, Tobacco and other Drugs)
2. Obesity
3. Access to Health Services

Over the period of June 1, 2012 – May 31, 2015, OHRH implemented action plans to address these prioritized community needs in Daviess County.

2.2 Additional Areas of Identified Need, 2012-2015

Additional community needs were identified from the secondary and primary data analysis, but not selected as community priorities for Daviess County. Because many of the areas of need are interrelated and influence one another, these additional areas were provided to offer a more complete picture of community needs in Daviess County. This was especially pertinent to the prioritized area of Access to Health Services, as it affects and is affected by many of the additional needs, which include:

- Cancer
- Heart Disease & Stroke
- Immunization & Infectious Diseases
- Maternal, Fetal & Infant Health/Family Planning
- Mental Health & Mental Disorders
- Older Adults & Aging
- Prevention & Safety
- Respiratory Diseases
- Economy: Poverty
- Public Safety

2.3 Evaluation Results on Prioritized and Additional Needs

A table representing progress made during the first CHNA process, year ending May 31, 2015 can be viewed in the Community Health Needs Assessment Appendix, page Appendix-1.

3 Methodology

This CHNA report builds on existing community health assessment and improvement efforts in Daviess County and its surrounding areas. Green River District Health Department (GRDHD) engaged OHRH and Daviess County community members in completing the 2015 GRDHD Community Health Assessment (CHA), 2015 Vulnerable Communities Addendum and 2015-2018 Community Health Improvement Plan (CHIP), which can be found at http://www.healthdepartment.org/CHACHIP.htm. OHRH and GRDHD have a tradition of collaborating to improve health, and this CHNA provides another example of how hospital and health department share resources and expertise to address community health issues in Daviess County.

Daviess County needs and strengths were identified in the Green River District assessment and planning process. OHRH partnered with Xerox Community Health Solutions to collect additional insights and context for Daviess County. Eight key informant interviews were conducted to probe more deeply into health and quality of life issues in the county. Community resources were also identified in these interviews.

This CHNA report synthesizes key informant interview findings with the GRDHD CHA, Vulnerable Communities Addendum, and CHIP reports for Daviess County. Interview findings are summarized in Section 5.3. Current demographic data for Daviess County, presented in Section 4, are obtained from the Owensboro Health Community Dashboard (http://www.owensborohealth.org/health-wellness/health-needs-assessment/).

3.1 MAPP Process for Green River District Community Health Assessment and Improvement Planning

GRDHD utilized the strategic planning framework known as Mobilizing for Action through Planning and Partnerships, or MAPP, developed by the National Association of County & City Health Officials (NACCHO). MAPP is a community-driven strategic planning process developed by NACCHO and the Centers for Disease Control and Prevention (CDC) to assist communities in organizing partners, collecting comprehensive data and implementing an action plan.

3.1.1 Organization and Data Collection

Organization of the CHA by the GRDHD was accomplished through a performance management system process of planning, setting expectations and monitoring the progress of the Assessment at Performance Management Team meetings. It was through this process that the following actions were selected as the methodology.

CASPER

District-wide primary data was collected through a Community Assessment for Public Health Emergency Response (CASPER) in November 2014. The CASPER event was conducted in coordination with the CDC and Kentucky Department for Public Health and included participants from state and local health departments and university students. A two and a half hour just-in-time training on CASPER methodology, use of tablet computers for data collection, field safety

and interviewing techniques was conducted by CDC personnel at the beginning of each two-day operational period. Each two-person interview team was issued field equipment, a GRDHD agency vehicle and an assignment of one or two clusters each sampling day. Detailed road maps and aerial photographs of each cluster were provided to survey teams.

NACCHO MAPP Training

GRDHD helped to educate community stakeholders on the MAPP strategic planning process in December 2014 with a MAPP training event conducted by the National Association of County and City Health Officials (NACCHO). Partner agencies and local health department staff participated in the one day training which incorporated interactive skill-building exercises into the six phases of MAPP. Shared experiences of the previous CHA-CHIP cycle reinforced collaborative opportunities and provided a strong foundation for the next steps.

Public Forums

Dr. Christian Williams of Western Kentucky University facilitated community forums and MAPP assessment exercises to identify strengths, risks and trends that contribute to community health. Participants included representatives from hospitals and healthcare providers, behavioral health, education, local government, business and industry, community based organizations and the general public.

Secondary Data

Secondary health data were gathered through a variety of sources, as described in Section 3.1.2.

3.1.2 Six MAPP Phases

The MAPP process includes six phases including partnership development, visioning, assessment, identifying priority issues, formulating goals and strategies and taking action.

1. ***Partnerships****:* Drawing on the broad participation of partners during the previous cycle (2012-2015), representatives from local coalitions, hospitals, healthcare providers, governance and education as well as concerned citizens came together to participate in the MAPP process. In addition, partner agencies from the preparedness sector focused on building community resilience through MAPP.

2. ***Visioning****:* A vision statement was selected to guide CHIP decisions. Visions were created through consideration of MAPP assessments and four perspectives (described below); these visions describe an idyllic community.

3. ***Assessment*****:** The assessment portion of the MAPP process includes four different assessments: Themes and Strengths Assessment, Forces of Change Assessment, Local Public Health System Assessment, and the Community Health Status Assessment. Perceptions about quality of life, local assets, and issues that interest the community contributed to the Themes and Strengths Assessment. The Forces of Change Assessment identified trends and other issues that could impact the community. To measure partnership involvement and delivery of services, the Local Public Health

System assessment was conducted. The Community Health Status Assessment provided primary and secondary data on the community's health conditions. Findings for Daviess County from each assessment are presented in Section 5.1.

GRDHD considered four perspectives in assessing the health of our communities:

a) Data Perspective: Quantitative data was used to develop a social, economic and health portrait for the county. Data were drawn from state, county and local sources including Kentucky Health Facts, US Census Bureau Data, County Health Rankings, Kentucky Department for Public Health and the Kentucky Health Benefit Exchange.

b) Organizational Perspective: Qualitative data was derived from forums and focus groups conducted. A wide range of organizations, community stakeholders and residents shared their perceptions of community, health concerns, and services, programs and events necessary to address those concerns. During the forums, local health indicators were presented along with the community survey and previous cycle initiatives; attendees participated in a dialogue around the health and their community. The organizational perspective explored current health priorities, identified strengths and local resources, noted potential forces of change and gaps in services. The organizational perspective is key to informing funding and program priorities.

c) Individual/Household Perspective: To gather information about its population, GRDHD conducted a Community Assessment for Public Health Emergency Response (CASPER). This community survey supplied answers to questions regarding perceived health of the community, strengths, weaknesses, specific health diagnoses, environmental issues and level of "preparedness" in the case of an emergency or natural disaster.

Focus groups and Surveys: Although the Community Survey captured opinions from a representative sample, the needs of disparate populations may not have been adequately covered. Daviess County focus groups were conducted to elicit input from low-income, transient and minority populations. Discussions explored participants' perceptions of their communities, priority health concerns and perceptions of health, prevention and healthcare services as well as suggestions for services and programming to address these issues.

d) Historical Perspective: Green River District initiated the MAPP process for the first time in January 2012. Local partners came together to assess their respective community's health using input gathered using a three prong approach of health data, public opinion (community survey) and partnership contributions (in-depth conversation in county-specific focus groups). This information was used to develop the 2012-2015 CHIP. Daviess County selected three strategic initiatives to address over the three-year cycle. Local partners met monthly and pursued objectives to impact their communities directly. District wide reports were completed semi-annually; a public health forum each spring and

annual summary document each fall. The CHA is available at http://www.healthdepartment.org. Flash drives with 2012-2015 information as well as the 2015 CHA was made available to public and community partners throughout the cycle. Postcards announcing availability of CHA results through the health department website were provided to local businesses throughout the district.

4. *Identifying Strategic Issues:* In May 2015, a summary of the visioning, assessments and perspectives was presented at a community forum. With priority issues established, live audience voting facilitated dialog and selection of the strategic initiatives selected in each county. Common themes emerged: Obesity/Nutrition/Physical Activity (lifestyle factors), Tobacco/Substance Abuse, Access to Care, Mental Health and Teen Issues. Dental health and environmental factors were also noted.

5. *Formulating Goals and Strategies:* In subsequent months, the local health coalitions (accountability groups) reviewed data from the CHA and worked to establish specific goals and objectives to address each of the selected strategic initiatives. This work is being finalized.

6. *Taking Action:* Action teams focused on priority health areas in Daviess County will plan, implement and evaluate activities related to their chosen initiatives. Monitoring progress and collecting data will be conducted on an ongoing basis and reported through local coalitions, the Regional Health Council and GRDHD.

3.2 Additional Collection of Vulnerable Population Data

Feedback from vulnerable populations is considered very valuable, but certain minority groups were not well represented at the initial CHA forums conducted in January 2015. In order to obtain input from these groups, GRDHD attempted to schedule individual focus groups with residents of income-based housing, homeless shelter residents, Hispanic residents, black residents and international refugees.

Three focus groups in Daviess County were held at the following locations:

- The Learning Villa (income-based scholar housing)
- Daniel Pitino Shelter (a homeless shelter for families and single women)
- The International Center (for refugees from Myanmar)

The focus group discussion questions align with the MAPP Assessments. An amended version of the CASPER MAPP survey was administered to the participants at the end of each focus group meeting. An additional CASPER MAPP survey was used to collect input from Hispanic residents.

3.3 Additional Collection of Daviess County Data

For additional context and insights into strengths and needs in Daviess County, Xerox Community Health Solutions (formerly Healthy Communities Institute) provided OHRH with assistance in collecting primary qualitative data.

Key informants are individuals recognized for their knowledge of community health issues in one or more areas; their names were provided by OHRH in February 2016. Eight key informants were interviewed for their knowledge about community health needs, barriers, strengths, and opportunities (including the needs for vulnerable and underserved populations as required by IRS regulations). Interview topics were not restricted to the health area for which a key informant was nominated. Please see Appendix B for key informants and interview questions.

Excerpts from the interview transcripts were coded by relevant topic areas and other key terms using the qualitative analytic tool Dedoose.[1] The frequency with which a topic area was discussed in key informant interviews was one factor used to assess the relative urgency of that topic area's health and social needs.

[1] Dedoose Version 6.0.24, web application for managing, analyzing, and presenting qualitative and mixed method research data (2015). Los Angeles, CA: SocioCultural Research Consultants, LLC (www.dedoose.com).

4 Daviess County Demographics

The Owensboro Health Community Dashboard provides demographic data from Nielsen Claritas.[2] The following demographic data were updated in January 2016.

Table 4.1: Daviess County Demographics, 2016

	Daviess County	Kentucky
2016 Population	**98,685**	**4,436,515**
2016 Households	**39,692**	**1,762,621**
Percent Pop Growth 2010 to 2016	**2.10%**	**2.24%**
2016 Population by Single Race and Sex		
White	89,253 (90.44%)	3,841,186 (86.58%)
Black/Af Amer	4,741 (4.80%)	363,576 (8.20%)
Am Ind/AK Native	115 (0.12%)	10,850 (0.24%)
Asian	894 (0.91%)	62,159 (1.40%)
Native HI/PI	77 (0.08%)	3,130 (0.07%)
Some Other Race	1,388 (1.41%)	65,109 (1.47%)
2+ Races	2,217 (2.25%)	90,505 (2.04%)
2016 Pop by Ethnicity and Single Race		
Hisp/Lat	2,835 (2.87%)	159,451 (3.59%)
Not Hisp/Lat	95,850 (97.13%)	4,277,064 (96.41%)
2016 Population by Age		
2016 Pop, Age <18	23,914 (24.23%)	1,010,072 (22.77%)
2016 Pop, Age 18+	74,771 (75.77%)	3,426,443 (77.23%)
2016 Pop, Age 25+	66,084 (66.96%)	2,994,029 (67.49%)
2016 Pop, Age 65+	16,309 (16.53%)	688,846 (15.53%)
2016 Median Age	**39.1**	**38.9**
2016 Pop 5+ by Language Spoken at Home		
Speak Only English at Home	89,049 (96.63%)	3,956,753 (95.04%)
Speak Spanish at Home	1,979 (2.15%)	105,571 (2.54%)
Speak Asian/PI Lang at Home	303 (0.33%)	32,331 (0.78%)
Speak Indo-European Lang at Home	740 (0.80%)	52,271 (1.26%)
Speak Other Lang at Home	86 (0.09%)	16,361 (0.39%)
2016 Average Household Size	**2.42**	**2.44**
2016 Median Household Income	**$50,492**	**$45,528**
2016 Households by Race and Household Income		
2016 Median HH Inc, White	$51,989	$46,965
2016 Median HH Inc, Black/Af Amer	$30,432	$31,411
2016 Median HH Inc, Am Ind/AK Native	$40,455	$38,924
2016 Median HH Inc, Asian	$72,656	$64,025

[2] Available at: http://www.owensborohealth.org/health-wellness/health-needs-assessment/?hcn=Demographics

	Daviess County	Kentucky
2016 Median HH Inc, Native HI/PI	$40,000	$47,319
2016 Median HH Inc, Some Other Race	$28,333	$38,029
2016 Median HH Inc, 2+ Races	$31,458	$35,500
2016 Households by Ethnicity and Household Income		
2016 Median HH Inc, Hisp/Lat	$36,790	$37,148
2016 Median HH Inc, Not Hisp/Lat	$50,946	$45,759
2016 Families Below Poverty	**3,493 (13.21%)**	**171,150 (14.52%)**
2016 Families Below Poverty with Children	**2,850 (10.78%)**	**126,033 (10.69%)**
2016 Population 25+ with Less Than High School Graduation	**7,927 (12.00%)**	**483,771 (16.16%)**
2016 Percent Civ Labor Force Unemployed	**7.41%**	**8.89%**

Nielsen Claritas, 2016

5 Daviess County Needs and Strengths

5.1 MAPP Process Findings

5.1.1 Community Health Visioning

Daviess County community members described their ideal community as:

- A county where children's education is not only valued but of the upmost importance in schools that are safe and promise as well as deliver a quality education.
- A community that not only has access to affordable healthcare but where the individuals are educated on the how to access the healthcare.
- A community that does not feel threatened or unsafe day to day and can actually rely on the community in times of need and disparity.
- A common recognition that the connection between environmental health such as clean air and water have a direct correlation with our Personal, Community and Mental health. To not take for granted the natural resources that are present but to respect them and the environment.
- Where there is expansion there is a chance of profit. Bringing in new businesses and/or events will add to the overall quality of life as well as the hope of economic development.
- Partnerships created will only further the development of the community and economy as well as provide more networks and career prospects.

5.1.2 Community Health Status Assessment

GRDHD gathered information about its population by conducting a Community Assessment for Public Health Emergency Response (CASPER). CASPER is a tool and methodology promoted by the CDC for conducting a post-disaster rapid needs and health assessment. This methodology utilizes multistage cluster sampling and is well suited to efficiently gather information from a random and representative sample of the population served by the GRDHD. Results from the Green River District CASPER can be found in Appendix D. These regional findings are relevant for understanding community perceptions of health issues and needs in area around and including Daviess County. Table 5.1 presents data specific to Daviess County.

Table 5.1: Daviess County Community Health Status

Health Indicator	Daviess County		Data Source
Access to Health Services	# of Physicians – 212 # of Dentists – 49 # of Mental Health Providers - 251		2012, KY Health Benefit Exchange & Deloitte
Clinical Preventative Services	Diabetic Screening 83%	Mammography Screening 74%	2014 County Health Rankings
Environmental Quality	Air pollution – Average Daily Particulate Matter 14.1	Drinking Water Violations 0	2014 County Health Rankings

Health Indicator	Daviess County			Data Source
Injury & Violence	Violent Crime Rate 177 per 100,000	Injury Death Rate 75 per 100,000	Motor Vehicle Deaths 12 per 100,000	2014 County Health Rankings
Maternal, Infant, and Child Health	Early and Regular Prenatal Care 68%	Low Birth Weight Babies 7%	Child Mortality (under 18) 71.3 per 100,000	2014 County Health Rankings
Mental Health	Ratio of Mental Health Providers 635:1	Average Poor Mental Health Days (in the past 30 days) 3.7		2014 County Health Rankings
Nutrition, Physical Activity, Obesity	Obese Adults 30%	Physical Inactivity Among Adults 27%	% Population with Limited Access to Healthy Foods 4%	2014 County Health Rankings
Oral Health	Ratio of Dentists 1747:1	Adults Missing 6 or More Teeth 19%		2014 County Health Rankings
Reproductive and Sexual Health	Chlamydia Rate 404.2 per 100,000	Teen Pregnancy Rate 42.6 per 100,000 girls age 15-19 years		2013, Kentucky Department for Public Health
Social Determinants	Median Household Income $46,555	Less than High School Diploma 13.3%	Population Living in Poverty 14.6	2012, Kentucky P-20 Data Collaborative, US Census Bureau
Substance Abuse	Excessive Drinking Rate 13%	Driving Deaths with Alcohol Involvement 40%	Drug Poisoning Deaths 16 per 100,000	2014 County Health Rankings
Tobacco	Adult Smoking 24%			2014 County Health Rankings

5.1.3 Community Themes and Strengths

The MAPP Community Themes and Strengths Assessment seeks to answer:

- What is important to the community?
- How is the quality of life perceived in the community?
- What assets does the community have that can be used to improve community health?

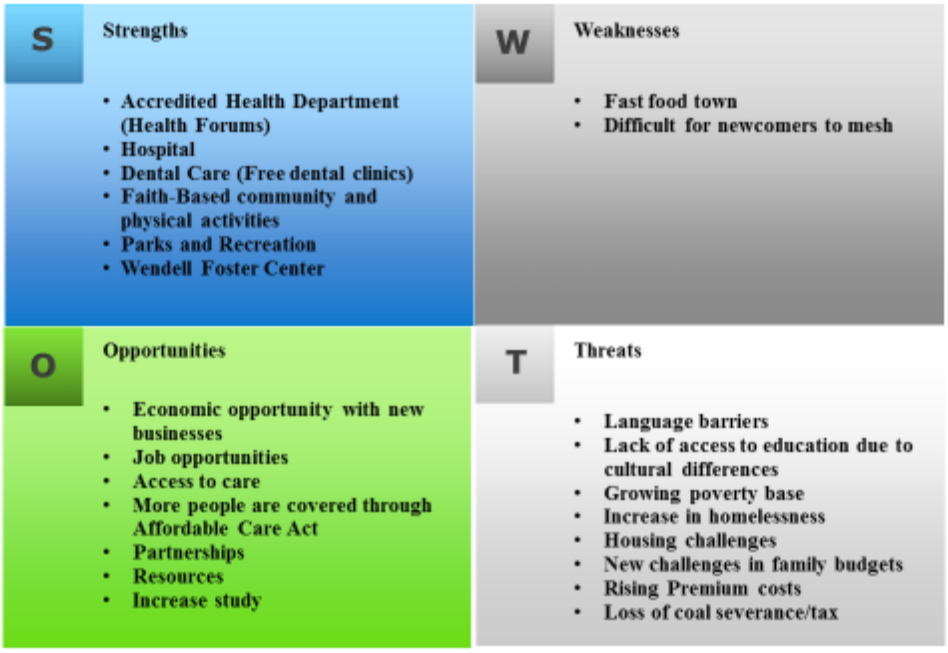
Combined, these provide an understanding of how community members perceive their community. Table 5.2 provides an overview of responses from Daviess County residents.

Table 5.2: Daviess County Community Themes and Strengths

What is important in the community?	How is the quality of life perceived in the community?	What are some community assets to improve health?
• Safe place for kids (2) • Schools (2) • Medical/Healthcare Resources (2) • Low crime rates (2) • Essential Services • Athletics and Recreational Sports/Parks (YMCA, The Greenbelt) • Transportation (GRITS) • Employment and Job Availability • Strong Faith Community • Healthy workforce • Clean Environment (2) • Mental Health Providers • Access to Dental Care • Maintaining a stable workforce • Sense of Community pride • Strong Partnerships (2) • Public education on Resource availability • Quality of life • Children's health • Temporary housing • Culture • Downtown developments (2) • Nutrition	• Improving Overall • Difficult for newcomers to mesh • Low wage town with a low cost of living (2) • Small town feel with access to larger nearby communities • Welcoming Community (Friday After 5 and Riverfront) • Depends on economics (2) • Short commutes • Fast Food town • Good place to raise children • Safe Community	• Wendell Foster Center (2) • Medical/Healthcare resources • Parks and Recreation (2) • Public Transportation (GRITS) • Excellent school systems (public and private) • Faith-Based Community and physical activities (sports/teams) (2) • Quality of Pediatric Medical Doctors • Dental Care (Free Dental clinics) • Hospital (2) • Accredited Health Department (Health Forums) (2) • Local Government • Strong Partnerships • Local College Universities • Green Belt (Walking and Biking) • VA Clinic • Farmer's Market • Substance Abuse recovery centers • Physical Activity: 5K Run, Color Blast, Edge Ice Center, Golf courses, Tennis courts. • Rejuvenation of Downtown area • Senior Center • GRADD • Smoke Free restaurants

Daviess County community members identified additional common themes through a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, as illustrated in Figure 5.1.

Figure 5.1: Daviess County Strengths, Weaknesses, Opportunities, and Threats



5.1.4 Forces of Change

Participants at the January 12, 2015, CHA forum in Daviess County identified economic and social factors as the greatest forces of change. Perspectives shared include:

1. Healthcare provided through the Affordable Care Act has caused families to add healthcare to their budgets where in the past they didn't have to pay for high premiums, deductibles and copays. This in turn is causing a lack of funds elsewhere such as education. The legislation seems unstable as it is constantly changing triggering an overwhelming feeling for healthcare and citizens alike. However, through the Affordable Care Act more people will not only be covered but they will seek treatment sooner and will no longer forego preventative care.
2. As the aging population base rises there will be a demand for social security money. That population will rely on that money to live and pay for their day-to-day living expenses.
3. An economic opportunity can be created due to cultural diversity. The Burmese and Hispanic population for example can offer new businesses, cultural exchange and bilingual health professionals. An increase in a diversifying community will pose language barriers and presents cultural differences, which may hinder access to education. An increased stress on local resources such as housing may also transpire.
4. The closure of the coal mines has weakened the economy with the loss of coal tax and severance along with the unknown future of coal in Daviess County. Due to the closings new jobs are being sought out with the potential of higher wages and improved benefits

as well.

5. Natural Disasters such as the Ice Storm of 2009 that affected the community brought in support from the National Guard and allowed the community to pull together resources and support for those impacted by the storm. There too lied the potential of community awareness and education on preparedness for future natural disasters.
6. A need for increased resources for single parent families in need is growing daily. Those needs include but are not limited to free and reduced lunch, child care, vision and dental services. Daviess County has the opportunity to find new grants and services to assist these families.
7. Fear that the E-cigarette trend may lead to experimentation and new addiction becomes a more widespread concern within communities. There are unknown dangers that exist with E-cigs, the idea that people do not know what is in the vapor that is going into their bodies is worrisome. With all the effort put into counties going smoke-free a concern exists that the E-cigs may weaken the continuous efforts for the ordinances. Additional education and research may be necessary to learn further information about the E-cigarettes.
8. The rate at which college students are leaving for college but choosing not to return to their hometowns and use their newly acquired skills is "Brain Drain". While the college students are away they may realize the benefits of raising their children in a smaller community and move home bringing improved education and resources back to Daviess County.

Table 5.3: Daviess County Forces of Change

Forces Identified (Trends, Events, Factors)	Threats Posed	Opportunities Created
Cultural Diversity (Burmese, Hispanic) (3)	• Language Barriers • Lack of Access to education because of cultural differences	• Economic opportunity with new businesses.
Aggressive/Innovative to keep business especially with Hispanics	• Poverty base growing (2) • Increase in homelessness • Housing challenges • Insurance premium paid instead of bills	• Job opportunities
Affordable Care Act (5)	• Federal support only for short time • Funding for education decreases to cover medical • Family budgets never had to pay in past now part of budget. • Premiums going up, penalty involved • Baby Boomers needing care	• More are covered • Access to care • Seek Financial solvency to sustain enrollment
Aging Population Base (2)	• Social Security income solvency	
Natural Disasters (Ice storm, Windstorm, tornado)	• Unprepared at time	• Partnerships • Resources allocated
Loss of Coal (2)	• Loss of Jobs • Coal Severance Tax • Coal Tax	

Forces Identified (Trends, Events, Factors)	Threats Posed	Opportunities Created
Increase in single parent family home	• Child Care	
E-Cigarettes	• Lead to experimentation	• Increase study
Brain Drain	• Loss of skills and knowledge in area	

5.1.5 Local Public Health System Assessment

The Ten Essential Public Health Services (EPHS) were developed in 1994 as a framework of health activities that should be undertaken in all communities. The Core Public Health Functions Steering Committee developed this tool as a companion to the three core public health functions: assessment, policy development and assurance. The 10 EPHS serve as a guideline for what is commonly described as the "Public Health System" of a Community. A Public Health System is comprised of the many partners and agencies within a community who provide or have an interest in the health and wellbeing of the citizens within that community. Individually, one agency or organization may not have the capacity to fulfill the health needs of a community. However, the capacity of a community to meet the health care needs of its citizens is greatly enhanced with strong collaborative partnerships.

- EPHS #1: Monitor health status to identify and solve community health problems.
- EPHS #2: Diagnose and investigate health problems and health hazards in the community.
- EPHS #3: Inform/Educate and empower people about health issues.
- EPHS #4: Mobilize community partnerships and action to identify and solve health problems.
- EPHS #5: Develop policies and plans that support individual and community health efforts.
- EPHS #6: Enforce laws and regulations that protect health and ensure safety.
- EPHS #7: Link people to needed person health services and assure the provision of health care when otherwise unavailable.
- EPHS #8: Assure competent public and personal health care workforce.
- EPHS #9: Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
- EPHS #10: Research for new insights and innovative solutions to health problems.

Four of the Ten Essential Public Health Services stood out as strengths within Daviess County. These include: EPHS #3: Inform/Educate and Empower People about Health; EPHS #4: Mobilize Community Partnerships; EPHS #7: Link to Health; and EPHS #9: Evaluate.

Two of the Ten Essential Public Health Services are cited as weaknesses within Daviess County. These include: EPHS #2: Diagnose and Investigate Health Problems; and EPHS #10: Research.

Table 5.4: Ten Essential Public Health Services in Daviess County

EPHS #1: Monitor Health status to identify community health problems	EPHS #2: Diagnose and investigate health problems	EPHS #3: Inform/Educate and empower people about health
• Owensboro Health Dashboard • River Valley Behavioral Health • Kentucky treatment outcomes survey • School Health Assessments: Vision screening, attendance, health monitoring, and the KIP survey • GRDHD • Community Health Assessment and Community Health Improvement Plan (CHA-CHIP) • United Way • Audubon Area Community Services • Green River Area Development District • Treatment Providers	• GRDHD – Reportable diseases • Emergency Management • Bioterrorism • Emergency Room – Monitoring outbreak numbers	• Newspaper • "R-Word Campaign" (Wendell Foster) • Empowerment with technology (younger crowd) • GRDHD • Parenting Magazine • Healthy Horizons • School Nurses • Daviess County School Health assessments - Health Park • Employers promoting health

EPHS #4: Mobilize community partnerships	EPHS #5: Develop Policies	EPHS #6: Enforce Laws
• Younger people use the local news online • Regional Health (organization funding for 3 years) • Regional Health Council 10 organizations • Hospital • Health Department • Red Cross • Wendell Foster • Nursing Programs • River Valley Behavioral Health • United Way • Audubon Area Community Services • Dental Clinic	• Local smoking bans • State/Federal: Health Related legislation • Higher education: Establish courses of study for future professionals • Community Mental Health Ctr • Health Department: sewage, restaurant inspections, planning and zoning • Hospital: collect, analyze, measure, evaluate health data • Employers: Establish wellness programs and safety trainings • FDA: Approve drugs and standards for food production	• OSHA: workplace standards • Local law enforcement: Public safety and crime • Energy and Environment Cabinet: Public Utilities • Cabinet for Health and Family Services • The Joint Commission: accredits facilities and enforces compliance • GRDHD: Sanitation and food safety • County Board of Health • FDA: Police all medications, food labeling and nutrition standards

EPHS #7: Link to health	EPHS #8: Assure competent workforce
• DC-CAP-prescriptions • Hospital Physicians • United Way – Connecting and Funding • Primary Care Clinic – under- or uninsured • HANDS link to services • Dental Clinic – under or uninsured • Family Resource Center Case management • River Valley Behavioral Health Case Management • Wendell Foster special needs • International Center Education/Case management • Audubon Area Community Services – Transportation, Case Management, low income assistance • Boulware Center: nutritional, financial and life skills • Owensboro Regional Recovery: case management and substance abuse • KY cancer Program case management • GRDHD: case management, outreach, clinical services	• Universities (WKU, OCTC, KWC, Brescia) Educate/ Technical/ Vocational/ Internships • River Valley Behavioral Health – Needs a community resource directory • Hospital – Recruiting (Medical Doctors, Therapists, Physical Therapists) • GRDHD – Educate, Recruit, Case management, Outreach • Primary care clinic – U of L residency program and the diabetes prevention education

EPHS #9: Evaluate	EPHS #10: Research
• Federally Qualified Health Center (FQHC) – quality measures, report to HRSA • Data collection – KIP (substance abuse), Family Resource Center schools • River Valley Behavioral Health • KTOS Owensboro Health: 72 physicians hired since 2013 (44 specialized and 28 primary care) - access points - community dashboard • ACO • Clinically Integrated Network (CIN) • Police/Sheriff's Department arrests data • Health Department immunization data • Medical Reserve Corps (MRC) disaster preparation • Federally Qualified Health Center (FQHC) – report data on demographics of patients • CCHC/STARS rates daycares • Teen Outreach Program (TOP) • Health Department Environmental Services • Department of Education report campus crimes and sexual assaults	• GRDHD CASPER • Coroner's office causes of death • GRADD

5.2 Vulnerable Populations

Focus groups and surveys were employed to better understand the health challenges faced by low-income, homeless, refugee, and Hispanic populations in Daviess County. The following vulnerable groups were included in this additional data collection effort:

- Focus groups
  - Learning Villa residents
  - Daniel Pitino Shelter residents
  - International Center refugee clients
- Community survey
  - Hispanic residents

The following questions were asked in the three focus groups:

1. What do you see as the strengths of your community?
2. What do you see as areas that could be better for your community?
3. For your family, what do you see as the biggest concerns living in this community?
4. Where do you go for your health care needs? Do you have a doctor? If not, what is the reason?
5. Where do you get most of your health information?
6. Do you believe that most people find living here in this community (county) what they expected? Why or why not?

Table 5.5 presents a summary of the responses received by focus group. More details are available at: http://www.healthdepartment.org/CHA_CHIP/GRDHD%202015%20CHA%20Addendum%20Vulnerable%20Communities%2012-23-15.pdf

Table 5.5: Vulnerable Population Focus Group Themes

	Learning Villa Focus Group (low-income families)	Daniel Pitino Shelter Focus Group (homeless individuals)	International Focus Group (refugees)
Community Strengths	Many activities and resources	Safety net resources, community activities	Faith-based organizations, community services, institutions like hospitals and schools
Areas for Improvement	Some activities are too expensive; access to care and resources; children and teen health	Transportation; children and teen activities; drug and crime prevention	Communication (language barrier), help with finding jobs, transportation assistance
Biggest Concerns	Parenting concerns, especially around children's exposure to drugs, alcohol, and violence	Bullying; job access and minimum wage; affordable housing and childcare; public safety	Medicaid coverage and access to care; language barriers; housing; transportation

	Learning Villa Focus Group (low-income families)	Daniel Pitino Shelter Focus Group (homeless individuals)	International Focus Group (refugees)
Healthcare Access	Most did not have a primary care provider, utilizing walk-in clinics and convenient care services instead	Most did not have a primary care provider, utilizing convenient care services instead	Most go to health department for information; interpretation services are critical when seeking care from providers
Health Information Sources	Social media Internet Family Health dept Books & brochures Clinicians Learning Villa workshops	Social media Internet Friends Health dept Brochures Medicaid site Clinicians Case managers	Internet Friends/ church Health dept School nurse Hospital International Center
Community Expectations	Compared to expectations, want more leadership, doctors, and job opportunities	Cleaner and friendlier than expected; good parks and activities; some culture shock experienced	Good health system and affordable food and water compared to home country; government more willing to help

Focus group participants and respondents to a Hispanic Community Survey self-assessed their health status, identifying as having excellent, very good, good, fair, or poor health. Compared to the 2012-2014 Daviess County average of 20%,[3] the homeless and refugee populations surveyed reported having much worse health than other groups and the county average.

Figure 5.2: Self-Reported Fair or Poor Health Status, Vulnerable Populations

Additional findings for the focus groups and community survey respondents are presented in Sections 5.2.1 – 5.2.4.

[3] kentuckyhealthfacts.org

5.2.1 Learning Villa Focus Group

The Learning Villa is a housing development in Daviess County that assists single and married parents who are enrolled as fulltime students in a post-secondary education program and working toward self-sufficiency. Eligibility for the housing is determined by income, full-time student status and having at least one dependent child. The mission of the program is to work with local colleges to empower low-income families, through enrichment programs and services, to successfully graduate a post-secondary degree program, thereby enabling these individuals to self-sufficiently live and work within their communities.

The issues that rose to the top were obesity and depression issues for this community. Overall, the community feels “good” or “very good” about their health and feels that they live in a safe community where they can find assistance. However, there is need for access to more services that address healthy lifestyle choices and behaviors. This community seems to know where they can access healthcare but do not have a “medical home.”

5.2.2 Daniel Pitino Shelter Focus Group

The Daniel Pitino Shelter is a shelter providing emergency and transitional housing for the homeless. It is a non-profit organization that provides food, physical and mental health care, essential services and educational enhancement opportunities to the homeless within Owensboro-Daviess County. The shelter has the capacity to serve 65 individuals (50 transitional and 15 emergency).

The homeless community voiced concerns about bullying, crime, drug use, and overall mental health needs. Strengths named included numerous assistance programs and a close-knit community. Once again, this community knew where to seek medical services, but many reported not having a main family doctor and/or encountering barriers to accessing care, ranging from cost to transportation. Many participants also reported having a variety of chronic illnesses.

5.2.3 International Focus Group

In 2010, the Green River District received its very first refugee. Since that time, there has been a steady influx of refugees, mainly from Myanmar (formerly known as Burma). Most of these refugees initially resettle in Owensboro. According to the KY Refugee Health Assessment Report 2014, from January to June 2014, the state of Kentucky received 1069 adult and pediatric refugees. These refugees encounter language barriers and challenges navigating a new unfamiliar culture. The International Focus Group included 14 refugees; among them, three different dialects of Karen were spoken.

This focus group revealed numerous concerns and barriers for refugees and international populations. The priority issue identified was the language barrier. Participants reported feeling the community is safe, with places to go and people to reach out to for assistance. The majority of participants reported fair or poor health. Health issues and lack of preventive care prior to moving to Daviess County contribute to a prevalence of chronic disease and poor overall health. This community needs assistance with communication and adjusting to a new culture and environment.

5.2.4 *Hispanic Community Survey*

A convenient sample of Hispanic families in the Green River District were surveyed to understand their perceptions of access to healthcare, personal health and community safety, as the Hispanic community had not been represented at any health forums.

The results indicate the surveyed Hispanic community felt fairly good about their overall health and that chronic conditions were not a major burden in this population. Additional conversations with this community could reveal beneficial approaches to address their needs. For instance, adult education services could improve the overall health of a family, especially if health literacy and healthcare system navigation were incorporated into the curriculum.

5.3 Key Informant Testimony

In March – April 2016, Xerox Community Health Solutions conducted interviews with the following eight key informants to collect data on health and quality of life needs in Daviess County. Interview questions are presented in Appendix B.

Table 5.6: Daviess County Key Informants

Key Informant	Organization
Dr. Nick Brake	Owensboro Public Schools
Deborah Fillman	Green River District Health Department
Jeff Jones	Daviess County Coroner
Robyn Mattingly	Audubon Area Community Services
Dr. Paula McCaghren	River Valley Behavioral Health
Dr. Khanh Nguyen	One Health Family Medicine
Major Brock Peterson	Owensboro Police Department
Dr. Brandon Taylor	Community Dental Clinic

Figure 5.3 presents a word cloud, created using the tool Wordle.[4] The word cloud illustrates the topics that were discussed in the key informant testimony; concerns that were mentioned more frequently are displayed in larger font. Key informants discussed concerns surrounding Access to Health Services, Low-income/Underserved Population, Substance Abuse, Mental Health and Mental Disorders, and Language/Culture most often.

Figure 5.3: Word Cloud of Themes Discussed by Key Informants

Sections 5.3.1 through 5.3.7 below summarize major issues within the topic areas that were identified as concerns by at least 50% of key informants interviewed. Some concerns cut across multiple topic areas. Section 5.3.8 provides an overview of other important issues discussed by fewer than half of key informants. Community resources identified by the key informants are presented in Appendix C.

5.3.1 Access to Health Services

Access to care challenges relate to many other health and quality of life concerns. While uninsured rates dropped because of kynect (the state health insurance marketplace), many residents are still under-insured because of high deductibles; even if they have health insurance, they are not fully covered. Additionally, the state government may dismantle kynect and switch residents to the federal health insurance exchange.

The state's Medicaid expansion may also be reversed, which would further restrict access for low-income residents. As it is, Medicaid patients who move or switch phone numbers frequently (often due to socioeconomic issues) may have their coverage revoked by Medicaid due to mismatches in contact information. Another major issue for this population is the unaffordability of medications and assistive devices.

Economic changes in the region – such as the closing of coalmines and factories – will leave many former employees without health insurance. A shortage of affordable childcare options also negatively impacts the health and wellbeing of families. On the provider side, a key informant highlighted the need to incentivize more doctors and nurse practitioners to come practice in rural areas of the country.

Some residents may not be able access needed care during clinics' limited hours of operations, while cultural barriers and stigma prevent others from seeking care, especially for mental health and substance abuse issues. In addition, there are no detox facilities or in-house women's substance abuse treatment facilities in the county. Transportation and communication are significant barriers, especially for non-citizens, naturalized citizens, and low-income residents.

Language/Cultural Barriers

Language and cultural differences were identified as major barriers to accessing care. In the past, many of the region's agricultural workers were Hispanic/Latino, but the Burmese refugee population is growing and increasingly taking on these types of jobs. They face substantial language and cultural barriers, and many are dealing with lingering trauma and health issues from their past. In addition, many in this population are unaware that they qualify for healthcare. The Somali refugee population is also large and growing. One key informant observed that the region is lacking in supports for the refugee population that might be found in a large city or more multicultural environment.

Another key informant noted that finding good translators for Burmese, Somali, and Hispanic/Latino patients is a challenge; some providers are using translation apps, but the level of quality checking in such tools is insufficient. Translation is also available by phone, but is prohibitively expensive for providers serving Medicare and Medicaid patients. In addition, Kentucky requires that any translators used during therapy sessions must be certified; a family

member or friend can only provide translation services in an emergency.

One interviewee called for more social workers to address the social and cultural barriers that physicians do not have the time or resources to handle. Some issues reported to disproportionately impact specific race/ethnic groups include: urgent dental needs in the Hispanic/Latino and Burmese populations; lack of insurance among Hispanic/Latino children; and cultural stigma delaying some groups from seeking treatment for alcohol or drug abuse.

5.3.2 Substance Abuse

Alcohol, marijuana, methamphetamine, prescription drugs and opiates were identified as the most abused drugs in the community. One key informant noted a huge percentage of domestic violence, burglary, thefts, and robberies stem from substance abuse, as people with addictions try to support their habits. Another interviewee observed that patients with acute pain may be taking medications from friends or family. Acute oral pain was suggested as a major contributor to substance abuse.

The lack of detox programs in the region is a major concern: the state hospital and other local programs cannot treat individuals who are under the influence, but sending patients to far-away detox centers is expensive and inconvenient for patients.

Substance abuse and mental health issues are co-occurring disorders; people who have one tend to have the other. While substance abuse and mental health issues cut across all demographic groups, they tend to disproportionately impact low-income individuals, and one key informant noted the negative impact of substance abuse in African-American communities. A key informant stated that some people struggling with alcoholism do not seek help until they are suffering from cirrhosis, pancreatitis and other health issues.

Smoking rates had been declining among high school and middle school students, but one interviewee observed that students are now erroneously hearing that e-cigarettes are relatively healthy, leading to the rise of e-cigarette usage. High smoking rates lead to a range of negative health impacts in the community, such as increased rates of lung cancer, emphysema, COPD and heart disease.

5.3.3 Low-Income/Underserved Populations & Economy

Economic security is an issue that was acknowledged to impact multiple race/ethnic groups. Even with insurance, expensive co-pays can prohibit low-income residents from seeking different types of care. Assistive devices, such as hearing aids and eyeglasses, are not covered by all health plans and can be too expensive for some.

There are too few urgent and non-urgent dental providers who accept Medicaid, partly due to low reimbursement rates. Dental-related diseases are more prevalent in underserved and low-income families and significantly greater dental needs are identified among free- and reduced-lunch students through school dental screenings. Furthermore, visible dental and oral health issues are often barriers to securing and maintaining a good job.

Parents who work two or three jobs to make ends meet cannot spend much time with their children, which has been linked to higher prevalence of certain health issues. Lack of affordable

childcare leads some low-income parents to send children to kindergarten before they are ready.

Diet and exercise are important for preventing and controlling chronic conditions. The hospital provides some low-income patients with financial assistance for gym membership, to help these individuals better manage their conditions. However, fast food and unhealthy foods are the cheapest options in the area, making healthier choices difficult.

Tobacco and substance abuse are major issues among low-income residents. However, a shortage of detox programs in the region means only people who can afford to travel across state lines can get the treatment they need.

5.3.4 Exercise, Nutrition, and Weight

An interviewee called for more healthy community initiatives that can steer the culture in the county away from tobacco use, poor diets and physical inactivity. At present, many residents do not see the value of exercising. In addition, access to healthy foods is a concern; there are more fast food chains than stores that carry less processed and more natural foods. Part of the challenge is to break unhealthy eating and inactivity habits from an early age that carry into adulthood, but another major obstacle is the high cost of gym memberships and healthy foods like fruits and vegetables. It follows that many Medicaid patients struggle with blood pressure, diabetes and obesity.

Obesity is observed to be a greater burden among White residents than immigrant groups, and a key informant also emphasized the link between nutrition and obesity. The public school system offers free lunch and summer feeding programs, but there has been some student pushback against healthier options. The programs try to incorporate farm-to-table, but it is difficult to do with 5,000 students, despite the prominence of agriculture in the local economy.

5.3.5 Mental Health & Mental Disorders

A key informant observed that while mental health hasn't risen to the top of past community health assessments, it seems to always factor into the issues that are selected. Another noted that the prevalence of mental health issues has seemed to increase over the decades, although some of this may be attributed to better awareness and detection. A more recent positive development has been the police department's provision of critical incident training to teach officers how to properly handle people experiencing mental distress.

According to one expert, many less-privileged people receive mental health assessments and some are sent to Western State to get medicated, but then return after two weeks and do not receive any follow-up care. The discontinuity of care perpetuates the referral cycle and does not lead to improvements in health. Within the Burmese refugee community, many individuals experienced abuse and torture in their homeland and now struggle with symptoms of psychosis. There is also a large homeless population that moves to the region seeking services. A key informant observed that these homeless individuals sometimes take shelter in mental health facilities and hospitals, taking away spots from other patients who specifically need mental and behavioral health services.

5.3.6 Transportation

Lack of transportation is a particular challenge for Hispanic/Latino, Burmese and Somali residents, and becomes a major issue when appointments with specialty providers require out-of-town travel. The Green River Intra-County Transit System (GRITS) provides free or low-cost transportation, but requires that participants do not own a vehicle. GRITS also requires arrangements ahead of time to travel out of the county.

5.3.7 Health Education

Key informants noted that more education is needed, especially among low-income patients, that the cheapest foods and most widely available foods are not the healthiest options. One interviewee recommended that the whole community should be aware of the risks associated with substance abuse and know how to recognize early warning signs in their communities.

5.3.8 Additional Themes

The following themes were discussed by a minority of key informants and did not fall into the major categories presented above, but help to highlight other relevant concerns in Daviess County.

Education: Health and education go hand in hand; higher-educated residents tend to have better health outcomes. Better access to early childhood education – when implemented effectively – could be positive, especially for lower-income families.

Government & Politics: The dismantling of kynect was identified as a major threat to access to care.

Diabetes: Type 2 diabetes can be prevented and controlled through diet and exercise, but key informants discussed the challenge of convincing individuals of the value of making lifestyle changes, as well as the associated financial barriers.

Teen & Adolescent Health: Smoking – especially e-cigarettes – and oral health needs are two major concerns for this population.

Prevention & Safety: Dangerous conditions present in substandard housing presents a hazard for some low-income residents – especially Burmese refugees; one key informant noted that some unscrupulous landlords overcharge Burmese families for unsafe living conditions. More positively, the community's accomplishments in disaster preparedness were praised. The health department has fostered good working relationships between healthcare providers, police departments, and other organizations to ensure effective emergency response.

Environmental Health: There is a high prevalence of smoking and corresponding secondary smoke exposure. While water quality is good, a key informant expressed concern over air quality and the prominence of coal-derived energy in the region.

Oral Health: Affordable dental care is a need that disproportionately impacts low-income residents – due to both financial reasons and the higher prevalence of oral health needs observed in this population. Periodontal disease can contribute to a number of other health issues, including low birth weight and heart disease. While education and preventive care are integral to addressing oral health needs and challenges in the community, one interviewee

stressed that these approaches do not address current urgent and non-urgent needs of patients.

Children's Health: Access to better early childhood education and affordable childcare options would have a positive impact on children's health. School dental screenings have revealed many oral health needs among free- and reduced-lunch students.

6 Selected Priority Areas

6.1 Prioritization Process

6.1.1 Participants

A number of Daviess County community members, organizations, and other stakeholders participated in Green River District 2015-2018 community health improvement planning process. Daviess County partners included:

- International Center
- GRDHD
- City of Owensboro
- Owensboro Healthpark
- River Valley Behavioral Health
- Community Dental Clinic
- One Health, Owensboro Health
- WKU Student
- Daviess County Extension Office
- Junior League
- Daviess County Schools
- Child Care Aware
- Coventry Cares
- United Way
- Cliff Hagan Boys & Girls Club
- Puzzle Pieces
- YMCA
- Bluegrass Family Allergy
- Kentucky Cancer Program
- UK Student
- Wellcare Health

6.1.2 Potential Issues and MAPP Findings for Consideration

Potential priority issues were presented to Daviess County partners in a May 2015 community forum. Participants reviewed data and assessment results, discussed findings and voted for specific strategic initiatives to address in the 2015-2018 cycle. The Daviess County community considered the following areas of focus as potential priorities:

- Obesity/Nutrition/Physical Activity (lifestyle factors)
- Tobacco/Substance Abuse
- Access to Care
- Mental Health
- Dental Health

Daviess County faces substantial challenges across these areas. Within each area, the following themes emerged from the MAPP assessment process.

Obesity: Closely intertwined with the high rates of obesity throughout the district are nutrition, physical activity and chronic diseases such as diabetes. MAPP participants noted that the built environment (parks, recreational facilities) affect physical activity rates as do minimal healthy food options, such as high numbers of fast food restaurants. While community gardens have been initiated and farmers' market participation has increased in the last CHA-CHIP cycle, convenience and cost often play a role in choice of foods. Establishing "walkable communities" (more accessible communities where citizens can safely walk) may provide additional opportunities for physical activity.

Tobacco / Substance Abuse: Tobacco and substance abuse continue to be a concern. Substance abuse includes alcohol, tobacco and other drugs; all of which are commonly known to adversely affect the health of the user. MAPP Assessment participants celebrated the efforts toward tobacco and smoke free policy change. However, there are unknown dangers that accompany increased use of e-cigarettes/vapor smoking in local schools and throughout the community. E-cigarettes may lead to experimentation and new addictions. Some areas are seeing upward trends of narcotic and alcohol use, which affects crime levels and overall quality of life; often straining the family structure and system through courts and rehabilitation, cost of care and a spiral of unplanned pregnancies, youth use, neglect, homelessness as well as safety concerns.

Healthcare access and affordability: Access to health care was reported as a challenge. MAPP Assessment participants recognized the presence of substantial facilities, resources and services. However, in some rural areas, healthcare resources are lacking. Transportation to health care was also noted as an obstacle. Health insurance and costs continue to be a barrier to care; premiums are rising and the healthcare system is overwhelmed. Emergency room use for non-emergencies or in place of regular preventive care persists. Navigating the healthcare system remains an issue. Health literacy levels and lack of knowledge add to the challenge of navigating a complex health system; including comprehension of paperwork, medical bills, connecting with providers, and taking responsibility for one's own health and healthcare needs.

Mental Health: Mental health challenges were cited as an increasing health concern in the region. The rise in mental health issues relates to a loss of jobs and economic challenges, as well as insufficient services to address these needs, especially for lower income individuals. MAPP participants noted the connection between poor lifestyle choices such as overeating, alcohol, tobacco and substance abuse, which are often symptoms of underlying issues. Addressing the gap in mental health services could also help address other health issues.

Dental Health: Gaps in dental services have plagued Daviess County. Often, community members do not have access to dental insurance or do not know how to access dental

***Obesity** - How can we create a community where everyone can attain and maintain a healthy weight? How can we increase access to healthy foods and physical activity opportunities?*

***Tobacco** – How are e-cigarettes affecting our community? How we can offer cessation support that is successful? How can we target adolescents and teens with prevention? What can be done to assist communities with smoking bans and policy change?*

***Access to Care** – How can we promote awareness of and connections to community resources, programs, and supportive services? How can we identify and fill gaps in services and resources? How can we build a community system of care so that everyone has affordable, timely, and reliable access to high quality primary and specialty healthcare services?*

***Mental Health** - How can we attract more mental health providers to the area? What methods can communities utilize for early intervention, education, awareness and treatment programs? How do we provide support for families and friends?*

***Dental Health** – Are dental issues causing other chronic health issues? How can we educate about proper preventive dental care and the connection between oral health and overall wellness? Are people able to access dental care when needed? How can we address gaps in dental care?*

services. Community members have also voiced a concern that dental offices are not taking new patients or do not accept certain insurances. There are not enough providers to serve the population in need. Overlooked dental issues could lead to larger more serious issues, such as heart disease; conversely, some chronic diseases may also contribute to deterioration of teeth and gums.

6.2 Daviess County Priority Areas

CHIP process participants identified the following major concerns for Daviess County:

Top Concerns and Threats

- Access to Healthy Foods
- Access to Healthcare/Affordable Healthcare
- Tobacco/E-cigarettes/vapor

Top Issues Impacting Health

- Healthy Behaviors & Lifestyle
- Addiction
- Obesity

Based on these concerns, Daviess County selected three strategic initiatives to implement in the next action cycle:

- **Strategic Initiative 1: Reduce Substance Abuse**
  - *Accountability Group:* Healthy Horizons Substance Abuse Committee and the Alliance for Drug Free Owensboro and Daviess County
- **Strategic Initiative 2: Reduce Obesity**
  - *Accountability Group:* Healthy Horizons Obesity Committee
- **Strategic Initiative 3: Access to Care**
  - *Accountability Group:* Healthy Horizons Access to Care Committee led by United Way of the Ohio Valley

Mental health and oral health were also identified as growing concerns. Although Daviess County has the capacity to address these as separate strategic initiatives, it was decided to incorporate them into current initiatives.

7 Conclusion

While there are many areas of need in Daviess County, there are also numerous community assets and a true collaborative spirit that motivates community health improvement activities. This report provides an understanding of the major health and health-related needs in Daviess County and guidance for the hospital's community benefit planning efforts and strategic direction to impact priority health issues, especially around the selected priority areas of substance abuse, obesity, and access to care, mental health and oral health. Further investigation may be necessary for determining and implementing the most effective interventions.

Community feedback to the report is an important step in the process of improving community health. Please send your comments to Debbie Zuerner Johnson at debbie.johnson@owensborohealth.org.