

FY2020-2022

Community Health Needs Assessment



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Introduction

Forward

From May 2017-March 2019, UofL Hospital conducted a community health needs assessment (CHNA) to cover the fiscal years 2020-2022 (July 1, 2019-June 30, 2022). The approval and adoption of this report by the University Medical Center (UMC) Board of Directors complies with CHNA requirements mandated by the *Patient Protection and Affordable Care Act of 2010* and federal tax-exemption requirements.

Executive Summary

The community health needs assessment process involved the following steps:

- The “community served” was defined utilizing inpatient data on patient county of residence.
- Secondary population data (demographics and socioeconomic characteristics of the community) were gathered and reported using various sources, including the Robert Wood Johnson Foundation *County Health Rankings* and the Centers for Disease Control.
- Primary data was solicited from the following groups:
 - Louisville Metro Department of Public Health and Wellness (LMPHW).
 - Residents of the community served by UofL Hospital, including individuals representing the medically-underserved.
 - Comments on UofL Hospital’s previous CHNA.
- Health needs were prioritized according to a weighted ranking system that accounted for the impact of different types of health factors.
- UofL Hospital convened its Community Strategy Steering Committee to formally identify the significant health needs based on the data and hospital resources. These needs have been identified as:
 - Alcohol and Drug Use
 - Community Safety
- Also identified were resources potentially available to assist with addressing these significant health needs.
- An evaluation of the impact of the FY2017-19 CHNA and its Implementation Strategies report was conducted.
- These findings were presented to the University Medical Center Board of Directors (the governing body of UofL Hospital) for report coverage period (July 1, 2019 - June 30, 2022).
- This final approved and adopted report will be made public and widely-available on or before June 30, 2019, including on the UofL Hospital website at: <https://uoflhospital.org/community-health-needs-assessment>.

Organization Description

On July 1, 2017, University Medical Center, a nonprofit affiliate of the University of Louisville, assumed management of UofL Hospital. The UMC Board of Directors consists of thirteen members, all of whom are university-affiliated.

UofL Hospital is an academic teaching hospital at the heart of the Louisville Metro area in downtown Louisville, Kentucky. We offer a second-to-none cancer center, world-renowned trauma team and a uniquely streamlined, nationally accredited stroke center – the latest innovations in a history of world-class care.

UofL Hospital also includes the James Graham Brown Cancer Center. The multidisciplinary teams here specialize in treating cancers of the central nervous system (brain and spine), breast, gastrointestinal and reproductive systems, head and neck, lungs, as well as skin. They also have a team focused on blood and marrow transplantation.

UofL Hospital is the only Level I Adult Trauma Center in the region. The Trauma Center was re-verified by the American College of Surgeons in July 2018. The Trauma Center admits more than 3,500 patients each year, with 53% of patients in calendar year 2018 residing outside Jefferson County. This makes the Trauma Center a resource not only for Louisville residents, but also for people throughout the region. Included within the trauma care provided at UofL Hospital is the only dedicated adult burn unit in Kentucky.

In February 2013, UofL Hospital was named the first Joint Commission-certified Comprehensive Stroke Center in Kentucky and the 20th in the nation. This accreditation recognizes our ability to provide the most comprehensive stroke treatments available.

Community Served by the Hospital

Defined Community

For the purposes of this CHNA, the community served by UofL Hospital is defined as the geographic area from which a significant number of the patients utilizing hospital services reside. Inpatient discharge data for UofL Hospital from July 1, 2017-June 30, 2018 (the latest fiscal year available as of this writing) shows that Jefferson County was the county of residence for 59.21% of inpatients, or 10,388 of 17,543 patients. The remaining 40.79% of patients come from southern Indiana and other counties in Kentucky, with the majority residing south and west of Jefferson County, KY. However, of these areas, there is no concentration like in Jefferson County.

For comparison, the previous CHNA data from FY2015 showed 56.13% of UofL Hospital's inpatients resided in Jefferson County.

Because almost 60% of inpatients lived in the same geographic area in FY18, the service area for this community health needs assessment is defined as Jefferson County. The chart on the following page details the number of inpatients from Jefferson County zip codes with at least 100 patients. For zip codes with less than 100 patients, those numbers are grouped. This is compared against the remaining number of inpatients residing outside Jefferson County.

FY18 Inpatient Discharges' County of Residence—UofL Hospital				
<i>Zip Code</i>	<i>City</i>	<i>County, State</i>	<i>Discharges</i>	<i>Percent of Total Discharges</i>
40214	Louisville	Jefferson, KY	846	4.82%
40203	Louisville	Jefferson, KY	796	4.54%
40216	Louisville	Jefferson, KY	719	4.10%
40211	Louisville	Jefferson, KY	670	3.82%
40212	Louisville	Jefferson, KY	601	3.43%
40202	Louisville	Jefferson, KY	556	3.17%
40210	Louisville	Jefferson, KY	528	3.01%
40215	Louisville	Jefferson, KY	511	2.91%
40219	Louisville	Jefferson, KY	489	2.79%
40218	Louisville	Jefferson, KY	450	2.57%
40272	Louisville	Jefferson, KY	430	2.45%
40229	Louisville	Jefferson, KY	312	1.78%
40208	Louisville	Jefferson, KY	281	1.60%
40291	Louisville	Jefferson, KY	269	1.53%
40258	Louisville	Jefferson, KY	265	1.51%
40213	Louisville	Jefferson, KY	261	1.49%
40220	Louisville	Jefferson, KY	251	1.43%
40206	Louisville	Jefferson, KY	224	1.28%
40204	Louisville	Jefferson, KY	217	1.24%
40299	Louisville	Jefferson, KY	212	1.21%
40217	Louisville	Jefferson, KY	178	1.01%
40207	Louisville	Jefferson, KY	168	0.96%
40118	Louisville	Jefferson, KY	150	0.86%
40241	Louisville	Jefferson, KY	147	0.84%
40245	Louisville	Jefferson, KY	144	0.82%
40205	Louisville	Jefferson, KY	141	0.80%
40222	Louisville	Jefferson, KY	134	0.76%
40223	Louisville	Jefferson, KY	106	0.60%
40228	Louisville	Jefferson, KY	102	0.58%
All Others	Louisville	Jefferson, KY	230	1.31%
Total: Jefferson County, KY			10,388	59.21%
Total: All Others Not Jefferson County, KY			7,155	40.79%
FY18 Total Discharges			17,543	100.00%
Source: UofL Hospital				

Identification and Description of Geographical Community

Louisville is a major city—the largest in the state of Kentucky and the county seat of Jefferson County. The 2017 population estimate in Jefferson County was 771,158. The Louisville metropolitan area is often referred to as Kentuckiana because it includes counties in Southern Indiana. Louisville is southeasterly situated along the border between Kentucky and Indiana, the Ohio River, in north-central Kentucky at the Falls of the Ohio.

Jefferson County Population Demographics

Understanding the population demographics of the community served by UofL Hospital helped the hospital team understand characteristics unique to their community. Notable for Jefferson County in comparison to the state of Kentucky is more diversity in race and ethnicity among residents.

Jefferson County, KY Demographics (2017)			
	<i>Demographic Metric</i>	<i>Jefferson County</i>	<i>Kentucky</i>
Population	Population, 2017 estimate	771,158	4,454,189
	Population, Percent Change estimate: April 1, 2010 to July 1, 2017	4.1%	2.6%
Age	Persons under 5	6.4%	6.2%
	Persons under 18	22.3%	22.7%
	Persons 65 years and older	15.7%	16.0%
Gender	Female persons	51.6%	50.7%
Race/Ethnicity	White (alone)	72.3%	87.8%
	Black or African American (alone)	22.0%	8.4%
	American Indian or Alaska native (alone)	0.2%	0.3%
	Asian (alone)	2.9%	1.6%
	Native Hawaiian or Other Pacific Islander (alone)	0.1%	0.1%
	Two or more races	2.4%	1.9%
	Hispanic or Latino	5.3%	3.7%
Source: United States Census Bureau QuickFacts (2017)			

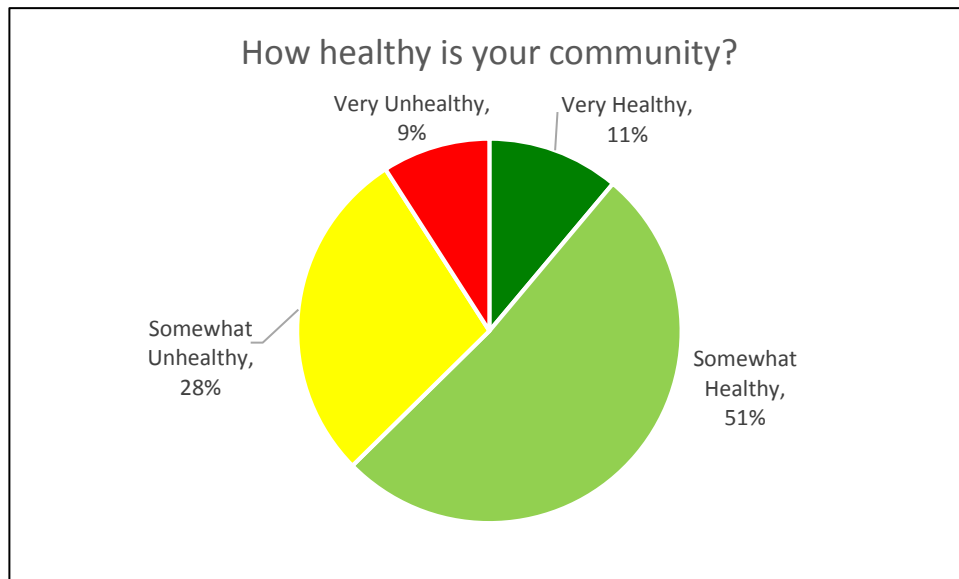
Health Data for Jefferson County

Community Survey Data

Survey and focus group data directly from residents of Jefferson County provided information on what the community's identification of health needs. The information below is culled from the Louisville Metro Department of Public Health and Wellness' Community Health Needs Assessment presentation released in September 2018 and highlights the most helpful information for the UofL Hospital CHNA.

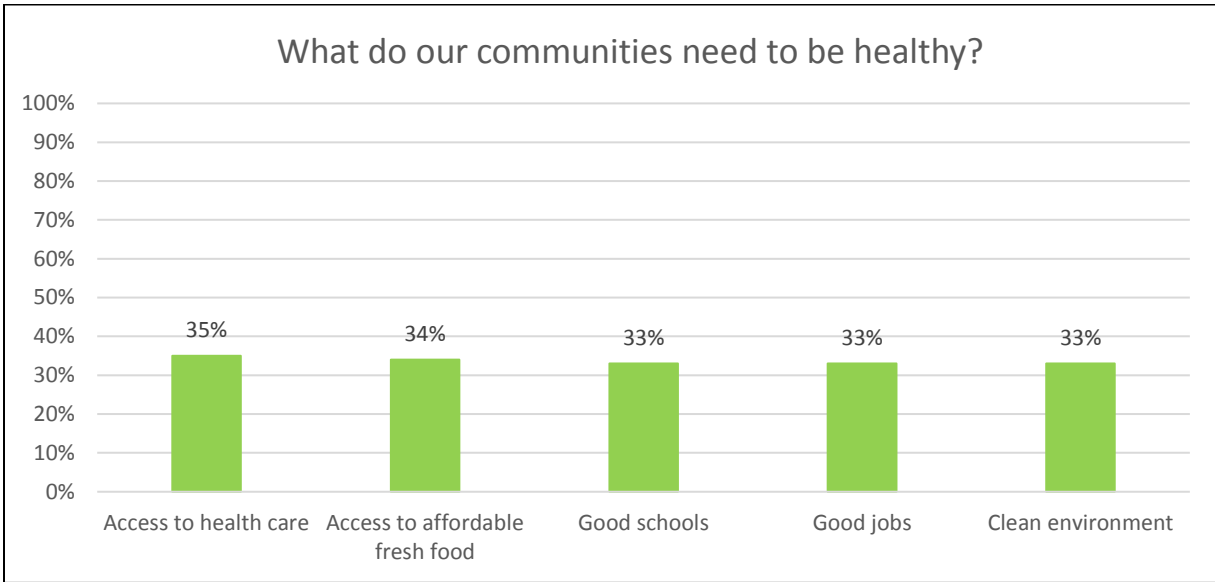
Perception of Health

The second question on the community survey asked, "How healthy or unhealthy would you say our community is? (Please think of 'community' as the ZIP code in Jefferson County where you live.)" Sixty-two percent of residents evaluated their ZIP code as very or somewhat healthy.



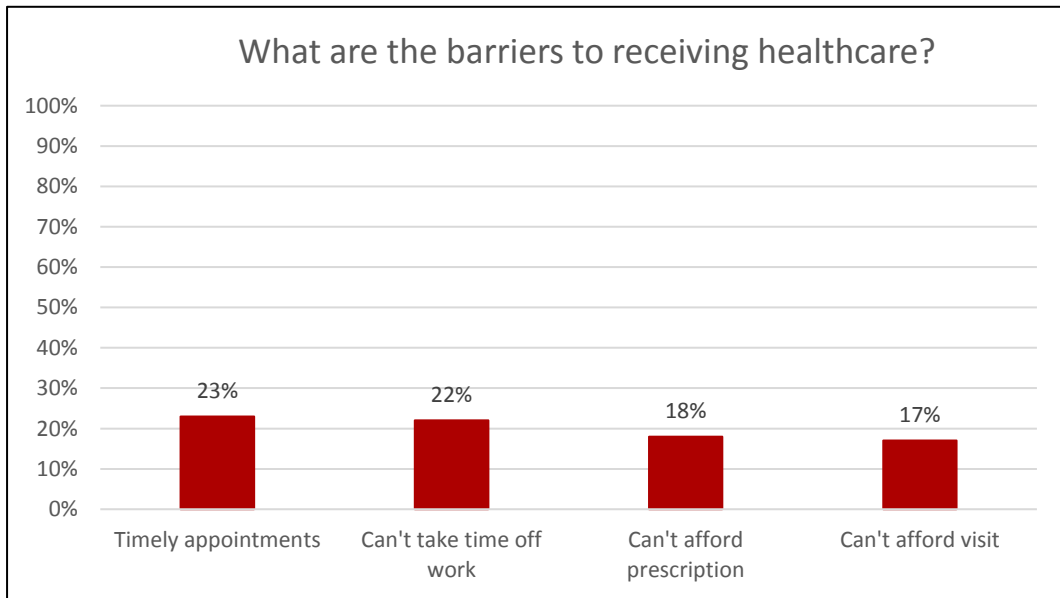
Protective Factors

A survey question asked, “Looking at the list below, what are the three most important things your community needs to be healthy?.” Because respondents could select multiple answers, the results do not add up to 100%. Thirty-five percent of respondents ranked “Access to Health Care” in their top three choices.



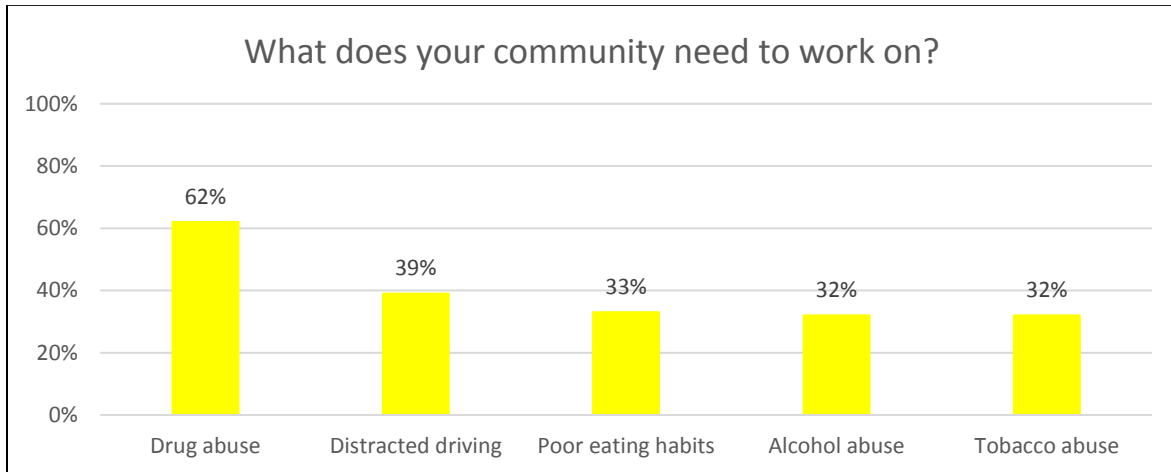
Barriers

Two separate survey questions asked residents about barriers to receiving healthcare. One question specifically identified barriers related to money, and the other question asked about barriers due to something other than money. The chart below shows the responses as they ranked across both questions. Twenty-three percent of respondents identified “Being able to get an appointment with my healthcare provider in a timely manner” as a barrier to receiving care.



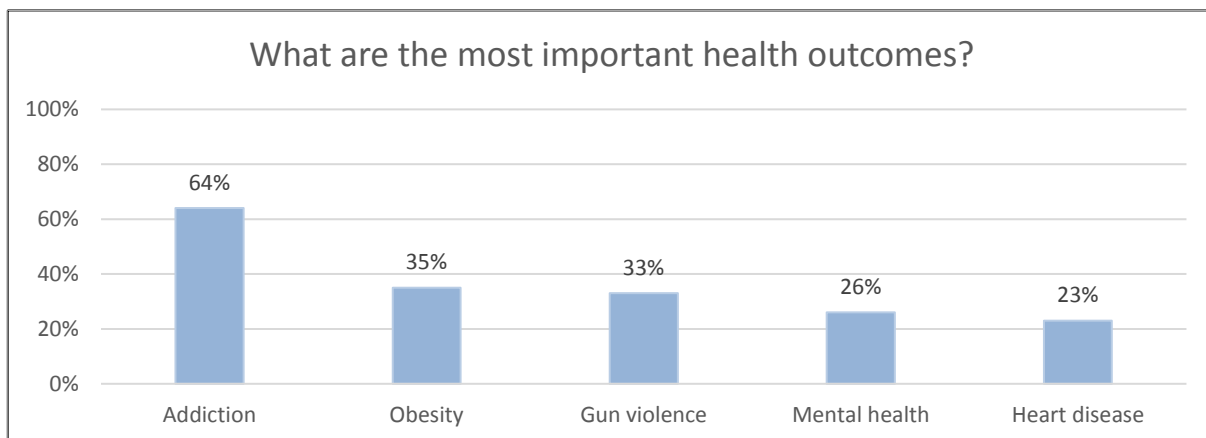
Health Behaviors to Address

A survey question asked “Looking at the list below, what do you think are the 3 most important health behaviors your community needs to work on? (That is, what behaviors have the greatest impact on the overall community’s health?).” Because respondents could select multiple answers, the totals do not add to 100%. Sixty-two percent of respondents identified drug abuse in their top three, with alcohol abuse and tobacco abuse each appearing on 32% of respondents’ surveys.



Health Problems to Address

A survey question asked “Looking at the list below, what do you think are the 3 most important health problems your community needs to work on? (That is, what problems have the greatest impact on overall community health?).” Because respondents could select multiple answers, the totals do not add to 100%. Sixty-four percent of respondents identified “Addiction to/overdose from drugs or alcohol” in their top three. Gun violence also appeared on 33% of respondent surveys.

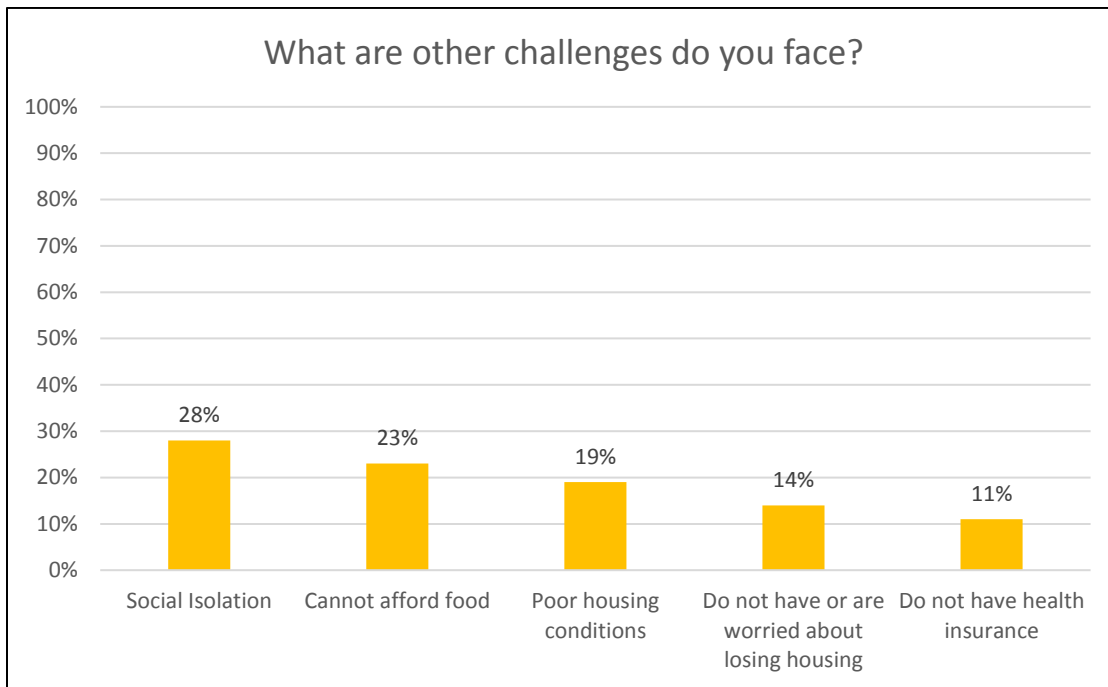


Other Challenges

There were six questions on the survey that asked about other challenges or barriers community members might face. They included:

1. “Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare, Medicaid or Indian Health Service?”
2. “What is your housing situation today?”
3. “Think about the place you live. Have you ever had issues such as mold, bug infestations, lead paint or pipes, inadequate heat, water leaks or other issues that made it unsuitable or unhealthy to live in?”
4. “Within the past 12 months, how often did the food you bought just not last and you didn’t have money to buy more?”
5. “Within the past 12 months, how often have you put off getting medical help because you couldn’t afford it?”
6. “How often do you feel isolated from others?”

The chart below shows the percentages of survey respondents who indicated issues impacting their health.



Health Outcomes

Health outcomes detail how healthy a community is and are measured by the Robert Wood Johnson Foundation *County Health Rankings* population health model as length of life (mortality) and quality of life (morbidity).

Mortality

Mortality is described in this county by two data sets: 1) the leading causes of death and 2) premature death.

1. Leading Causes of Death

The 2017 leading causes of death data for this community (the most recent year available as of this writing) show that cancer and heart disease are the major causes of death Jefferson County. In comparison to the 2014 data, which was reviewed in the previous CHNA, deaths from cancers have decreased. Heart disease, accidents, and homicides caused a higher rate of deaths in 2017 over 2014.

Health Outcomes: Mortality Leading Causes of Death in Jefferson County, KY (2017)				
Ranking	Cause of Death	Deaths	Population	Crude Rate Per 100,000 Residents
1	Malignant neoplasms (cancers)	1,599	771,158	207.4
2	Diseases of heart	1,593	771,158	206.6
3	Accidents (unintentional injuries)	606	771,158	78.6
4	Chronic lower respiratory diseases	479	771,158	62.1
5	Cerebrovascular diseases	318	771,158	41.2
6	Alzheimer's disease	309	771,158	40.1
7	Diabetes mellitus	207	771,158	26.8
8	Nephritis, nephrotic syndrome and nephrosis	178	771,158	23.1
9	Influenza and pneumonia	142	771,158	18.4
10	Septicemia	138	771,158	17.9
11	Intentional self-harm (suicide)	127	771,158	16.5
12	Chronic liver disease and cirrhosis	123	771,158	16
13	Assault (homicide)	115	771,158	14.9
14	Parkinson's disease	88	771,158	11.4
15	Essential hypertension and hypertensive renal disease	83	771,158	10.8

Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2017)

2. Premature Death

Premature death is another mortality measure, but more heavily reflects attention on preventable deaths by reviewing the years of potential life lost before age 75. For example, a death at age 50 contributes 25 years of life lost. The most recent data available for this measure is from 2015-2017 and is expressed as a rate per 100,000 Jefferson County residents. The Jefferson County rate shows that Jefferson County residents have more years of life lost compared to Kentucky residents overall. As compared to the 2015 data used in the previous CHNA, there has been an increase in premature death at the county, state, and national level.

Also noted are child and infant mortality, which are higher in Jefferson County than in top-performing U.S. cities, but are on par with Kentucky state averages. Life expectancy is also noted here, which is a little over a one year higher in Louisville than in the rest of Kentucky, but lower than in top U.S. cities.

Health Outcomes: Mortality			
Premature Death in Jefferson County, KY			
<i>Mortality Metric</i>	<i>Jefferson County</i>	<i>Kentucky</i>	<i>Top US Performers</i>
Premature Death: Years of potential life lost before age 75 per 100,000 population (Data from 2015-2017)	9,800	9,700	5,400
Child Mortality: Number of Deaths among children under age 18 per 100,000 population (Data from 2014-2017)	60	60	40
Infant Mortality: Number of all infant deaths (within 1 year) per 1,000 live births (Data from 2011-2017)	7	7	4
Life Expectancy (in years)	75.8	75.4	81.0
Source: County Health Rankings (2019)			

Morbidity

Morbidity is described as self-reported quality of health metrics. The self-reported health metrics below show the perception that Jefferson County residents have about their own health. Jefferson County residents perceive their own health to be better than the general population perceives their health to be in Kentucky overall, but Jefferson County residents still report poorer health than national benchmarks.

Disease prevalence is also reviewed to demonstrate morbidity. The prevalence of HIV infection in Jefferson County is over five times the prevalence in top U.S. cities and one-and-a-half times that of the prevalence in the rest of Kentucky. The prevalence of diabetes is also higher in Jefferson County than in top performing cities but is slightly less than in the rest of Kentucky.

Disability among those younger than 65 years of age is also reviewed as a quality of life metric. Jefferson County a lower percentage of residents on disability than the average for the rest of Kentucky.

Health Outcomes: Morbidity			
Quality of Life Metrics in Jefferson County, KY (2018)			
<i>Quality of Life Metric</i>	<i>Jefferson County</i>	<i>Kentucky</i>	<i>Top U.S. Performers</i>
Poor or Fair Health** ¹	19%	21%	12%
# of Poor Physical Health Days in Past 30 Days** ¹	3.9	4.8	3
# of Poor Mental Health Days in Past 30 Days** ¹	4.1	4.8	3.1
HIV Prevalence: Number of people aged 13 years and older with diagnosed HIV infection per 100,000 population ¹	274	180	49
Diabetes Prevalence: % of adults aged 20 and above with diagnosed diabetes ¹	12%	9%	13%
Disability: % of population under age 65 with a disability ²	10.5%	13.0%	8.7%
Low Birthweight: Percentage of live births with low birthweight (< 2,500 grams) ¹	9%	9%	6%
**Self-Reported Health Metric Source: County Health Rankings (2019) ¹ and U.S. Census Bureau ²			

Health Factors

Health factors influence an individual's health and are measured by four different factors: health behaviors, clinical care, social and economic factors, and the physical environment. Each of these factors encompasses several measures, known as the social determinants of health. The World Health Organization defines social determinants of health as "the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life."

Health Behaviors

Health behaviors describe the individual choices people make that impact their overall health. Behaviors related to substance use show a marked increase in drug overdose deaths from 26.8 deaths per 100,000 residents in 2014 to 45.6 per 100,000 in 2017. Alcohol use continues to be a health concern in Jefferson County, with almost one-fifth of adults reporting heavy and/or binge drinking. Additionally, alcohol is a factor in one-third of motor vehicle accident deaths.

Also notable for Jefferson County is a high rate of sexually-transmitted infections compared to both state and national averages, as well as the relatively high teen birth rate as compared to national averages.

Jefferson County has metrics similar to Kentucky's metrics for health behaviors related to diet and exercise and is below the national benchmarks for every health behavior in this area.

Health Factor: Health Behaviors in Jefferson County, KY (2018)			
<i>Health Behaviors</i>	<i>Jefferson County</i>	<i>Kentucky</i>	<i>Top U.S. Performers</i>
Health Behaviors Related to Alcohol and Drug Use			
Adult Smoking Rate ¹	19%	24%	14%
Excessive Drinking Rate ¹	19%	16%	13%
Alcohol-Impaired Driving Deaths ¹	30%	27%	13%
Drug Overdose Deaths Per 100,000 Residents ²	45.6	33	10
Health Behaviors Related to Sexual Activity			
Sexually Transmitted Infections: Number of newly-diagnosed chlamydia cases per 100,000 population ¹	676.4	395.2	145.1
Teen Births per 1,000 Female Residents Ages 15-19 ¹	35	38	15
Health Behaviors Related to Diet and Exercise			
Physical Inactivity Rate ¹	24%	27%	19%
Adult Obesity Rate ¹	33%	34%	26%
Food Insecurity: % of the population who lack adequate access to food ¹	16%	16%	9%
Limited Access to Healthy Foods: % of population who are low-income and do not live close to a grocery store ¹	4%	6%	2%
Sources: County Health Rankings (2019) ¹ and 2017 Overdose Fatality Report ²			

Clinical Care

Clinical care as an influence on health outcomes refers to access to care (measured by the uninsured rate and the ratio of community residents to providers) and quality of care (measured by preventable hospital stays).

Jefferson County has fewer residents per clinical care provider as compared to the rest of Kentucky and outperforms national benchmarks in ratios of primary care physicians and dentists. The uninsured rate in Jefferson County dropped from 16% in the last CHNA assessment to 6% in this dataset.

Notable for Jefferson County is the rate of preventable hospital stays, which is lower than the Kentucky average, potentially indicating that in Jefferson County there is increased accessibility to primary care services and more effective hospital services than in other parts of Kentucky. However, this metric is worse in Jefferson County than national benchmarks, which may indicate two points: 1) quality of care in outpatient settings is less than ideal and/or 2) patients may be overusing hospitals as a main source of care.

Health Factor: Clinical Care in Jefferson County, KY (2018)			
<i>Clinical Care Measures</i>	<i>Jefferson County</i>	<i>Kentucky</i>	<i>Top U.S. Performers</i>
Access to Care			
Uninsured Rate	6%	6%	6%
Ratio of Population to Primary Care Physicians	1,040:1	1,520:1	1,050:1
Ratio of Population to Mental Health Providers	350:1	490:1	310:1
Ratio of Population to Dentists	960:1	1,530:1	1,260:1
Quality of Care			
Preventable Hospital Stays: Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	5,633	6,168	2,765
Source: County Health Rankings (2019)			

Social and Economic Factors

Social and economic factors encompass education, employment, income, family and social support, and community safety. Notable for Jefferson County is the lower high school graduation rate as compared to national benchmarks. Also of note is that 60% of children in Jefferson County are eligible for free/reduced lunch, as compared to only 32% of top performing cities.

The protective factor of social support is measured here by the number of social associations (civic organizations, golf centers, labor organizations, religious organizations, fitness centers, etc.) per 10,000 residents. Both Jefferson County and Kentucky have a lower number of formal opportunities for social engagement than national benchmarks indicate.

In terms of safety, Jefferson County experiences higher rates of violent crime than the Kentucky average and much higher rates than national benchmarks. Injury deaths are also 65% higher in Jefferson County than national benchmarks. There are also relatively low ratios of residents to social associations in both Jefferson County and in the state overall as compared to national benchmarks. This may suggest low social support among Jefferson County residents.

Health Factor: Social and Economic Factors in Jefferson County, KY (2018)			
<i>Social and Economic Measures</i>	<i>Jefferson County</i>	<i>Kentucky</i>	<i>Top U.S. Performers</i>
Health Measures Related to Education			
High School Graduation ¹	88%	90%	96%
Some College ¹	69%	61%	73%
Health Measures Related to Employment/Economic Factors			
Unemployment ¹	4.4%	4.9%	2.9%
Median Household Income ¹	\$55,000	\$48,300	\$67,100
Income Inequality: Ratio of household income at the 80th percentile to that at the 20th percentile ¹	4.9	5.1	3.7
Persons in Poverty ²	14.1%	17.2%	12.3%
Children Eligible for Free/Reduced Lunch Price ¹	60%	59%	32%
Health Measures Related to Social Support			
Social Associations: Number of associations per 10,000 residents ¹	10	10.6	21.9
Children in Single Parent Households ¹	41%	34%	20%
Health Measures Related to Community Safety			
Violent Crimes Per 100,000 Population ¹	612	222	63
Firearm Fatalities: Number of deaths due to firearms per 100,000 population ¹	19	16	7
Injury Deaths: Number of deaths due to injury per 100,000 population ¹	94	91	57
Source: County Health Rankings (2019) and United States Census Bureau QuickFacts (2017) ²			

Physical Environment

Physical environment factors include air and water quality, as well as housing and transit. Transportation is often not considered when measuring housing affordability, so it is included here to better understand the overall affordability of life in Jefferson County. Notable for Jefferson County is the relative affordability of housing and transportation as compared to national benchmarks. Jefferson County, while low as compared to national benchmarks, provides the highest calculated transit access to the community in the state of Kentucky. Unfortunately, 15% of the population in Jefferson County experiences severe housing problems, which is defined as spending more than 50% of income on housing alone.

As far as environmental conditions, particulate matter in Jefferson County is higher than national benchmarks but is on par with state averages. Air pollution has decreased from the data collected in the previous CHNA.

Health Factor: Physical Environment in Jefferson County (2018)			
<i>Physical Environment Measures</i>	<i>Jefferson County</i>	<i>Kentucky</i>	<i>Top U.S. Performers</i>
Air Pollution—Particulate Matter ¹	12.9	10.7	6.1
Drinking Water Violations ¹	0%	N/A	N/A
% of Residents with Severe Housing Problems ¹	15%	14%	9%
% of Household Income Spent on Housing and Transportation ²	49%	N/A	≤45%
Transit Access: Index assessing connectivity, access to land area and jobs, and frequency of service ²	4.7	N/A	8.7
Source: County Health Rankings (2019) ¹ and Center for Neighborhood Technology (2019) ²			

Data Sources and Collaborators

Secondary Data Sources

Data sources used in this report include:

- Center for Neighborhood Technology
 - The *Housing and Affordability Transportation Index* was used to determine the potential impact of housing and transportation costs on the health outcomes in the community.
- Centers for Disease Control and Prevention
 - The *Underlying Causes of Death (2017)* were used to identify mortality in the community served.
- Kentucky Office of Drug Control Policy (Commonwealth of Kentucky Justice & Public Safety Cabinet)
 - The *2017 Overdose Fatality Report* was used to determine the effect of substance abuse on the community.
- Robert Wood Johnson Foundation
 - The *2019 County Health Rankings and Roadmaps* were used to determine the varying measures of health in the community served.
- United States Census Bureau
 - The *2017 Jefferson County Quick Facts* were used to illustrate community demographics.
- UofL Hospital
 - A member of the financial planning and decision analysis team provided information on the inpatients' county of residence and zip code level.

Health Department Collaboration

The Louisville Metro Department of Public Health and Wellness (LMPHW) is the only such agency that serves Jefferson County to provide health promotion and education to Jefferson County residents. The department is organized under two main branches: Health Operations and the Center for Health Equity. The Health Operations branch includes Health Services, Laboratory Services, and Environmental Services. The Center for Health Equity branch works across all functions of the department to ensure policies, practices and outcomes meet the needs of all people in every community. It is organized into Root Cause Teams: Early Childhood Development, Sociocultural Capital, Food and the Built Environment, Environmental Quality, Housing and Economic Development, and Criminal Justice. The Center for Health Equity also oversees the department's research and data collection and analysis as well as academic engagement.

Soliciting LMDPHW's input satisfies the IRS requirement to take into account feedback from local health departments with expertise relevant to the needs of the community served by the hospital. Additionally, feedback from the LMPHW and the aforementioned organizations further represents feedback from the underserved in Jefferson County due to the special knowledge of local health departments.

Primary Data Collection: Community and Organizational Input

The Louisville Metro Department of Public Health and Wellness convened the Community Health Needs Assessment Steering Committee in May 2017 to begin the process required of tax-exempt hospital and accredited health departments. The Steering Committee branched into multiple sub-committees, and a representative of UofL Hospital joined the Survey Design, Data Analysis, Asset Mapping, and Issues Areas sub-committees. At this time, other agencies

joined the various committees, representing members of the medically-underserved, low-income, and minority populations. Although not a comprehensive list, such agencies included:

- Norton Health
- Baptist Health
- KIPDA (Kentuckiana Regional Planning & Development Agency)
- University of Louisville Office of Community Engagement
- Louisville Metro Government Office of Community Services
- Greater Louisville Project
- Metro United Way
- Community Foundation of Louisville
- Kentucky Refugee Ministries
- University of Louisville School of Public Health
- Jefferson County Public Schools
- Park DuValle Community Health Center
- Family Health Centers
- Humana

UofL Hospital worked with the Louisville Metro Department of Public Health Wellness and the aforementioned agencies to design a community survey to solicit input from the general community on health needs in Louisville Metro (Jefferson County, KY). IQS Research provided data and technical expertise, and, at the request of UofL Hospital, developed two separate survey links to use in collecting responses. The patient survey was <http://surveys.iqsresearch.com/s3/CHNA-UofL-Hospital-Patients> and the hospital employee link was <http://surveys.iqsresearch.com/s3/CHNA-UofL-Hospital-Staff>. ULH made a \$5,000 contribution to the Louisville Metro Department of Public Health and Wellness to put towards the cost of IQS' support in the CHNA process.

- Community Input: Patients
 - UofL Hospital made paper surveys available from December 29, 2017 through January 31, 2018 in seven common spaces at the hospital. Two survey sites were set up in the adjacent Ambulatory Care Building, and three survey sites were set up at the James Graham Brown Cancer Center. Patients were invited to participate in the anonymous surveys with a flyer. Surveys were available in five languages (English, Spanish, Arabic, Swahili, and Nepali) at all twelve total survey site locations. Paper surveys were submitted to IQS to convert into electronic data.
 - UofL Hospital's Marketing and Communications team, housed within UofL Physicians, included the patient link to the survey in its December 28, 2017 patient and consumer newsletter, entitled *To Your Health*. The newsletter can be found in the archive here: <http://www.uoflphysicians.com/newsletter-archive>. As of December 28, 2017, the newsletter had a distribution list of approximately 30,000 email addresses.
- Community Input: Employees
 - UofL Hospital's Marketing and Communication team included the employee survey link in weekly official hospital communications beginning December 18, 2017 through January 22, 2018. The employee link

was also sent through the official communication channels to UofL Physicians staff and physicians during this same period.

In total, 3,500 Jefferson County residents took the survey. Since some demographics were underrepresented in the surveys, LMPHW held eight focus groups with a total of 82 participants. A weighted analysis was completed to match the demographics of Jefferson County and ensure the surveys were representative of the community.

Third Party Collaboration

No third-party organizations were involved in the writing of this report outside of the collaborating parties, and their specific involvement efforts are detailed on the lists above. A representative of UofL Hospital is wholly responsible for the data gathering and needs analysis in this report.

Information Gaps

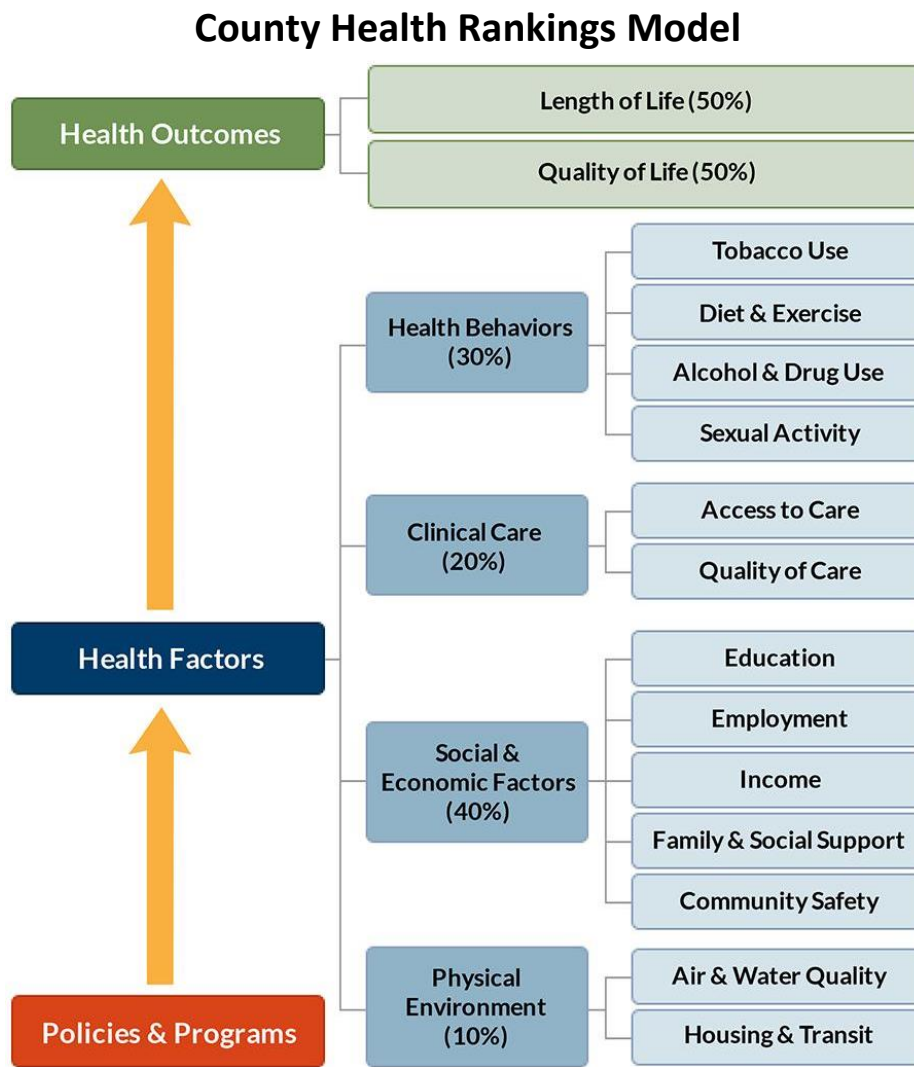
As is often the case with data collection, the data collected for this report contained some data from a few years prior to the current time. This may not reflect what is currently happening in the community and the impact of interventions which have since been placed.

Community Health Needs Assessment Process

County Health Rankings Population Health Model

The main data source for the secondary data used in this report is the Robert Wood Johnson Foundation *County Health Rankings*. They employ a model of population health emphasizing the many factors that, if improved, can help make communities healthier places. This model informs that most health outcomes—measured by both length of life and quality of life—are determined by the health factors in these categories: social and economic factors, health behaviors, clinical care and the physical environment.

These health factors represent what are commonly referred to as social determinants of health. The model shows that 40% of our health outcomes are determined by social and economic factors, 30% are determined by health behaviors, 20% are determined by clinical care, and 10% are determined by our physical environment. Each factor has multiple measures associated with it. A fifth set of health factors, genetics, is not included in these rankings because these variables cannot be impacted by community-level intervention.



County Health Rankings model © 2014 UWPHI

Purpose-Focused Prioritization Using the Population Health Model

An analysis of various health outcomes and factors can illustrate opportunities for UofL Hospital to address our community's health needs. By prioritizing which opportunities to address health needs are the most effective and applicable for the hospital's resources, we best understand how to be a community leader who can actively participate in improving the community's habits, culture and environment.

In order to prioritize the health needs of our community, we developed a ranking system. Each of the 13 health measures listed in the *County Health Rankings* model was assessed for the Louisville community. There were six prioritization factors for which each health measure was assessed:

- Magnitude
- Impact on mortality
- Impact on morbidity
- Trends
- Community input
- Strategic alignment

Each health measure received a score of zero to 13 (given that there are 13 health measures in the model). A score of 13 indicates the health measure outranked all others in importance for that prioritization factor. After being assessed by each prioritization factor and receiving a score in each area, the total scores for each health measure were totaled.

In our efforts to address the health needs that heavily influence health outcomes, we created a system for ranking community health needs using a weighted scale to account for the measure of influence. The measure of influence is the percentage of effect that this category of health factors has on health outcomes. The weighted score was created by multiplying the total score for each health measure by the percentage of their influence on overall health. For example, Community Safety is a social and economic factor. If all six prioritization factors added up to a total score of 78, we then multiplied this total score by 40%—the measure of influence for a health behavior according the *County Health Rankings* model. This weighted score was compared against the other health measures. The factors with the highest weighted scores were identified as significant community health needs to be addressed by UofL Hospital.

Using such a ranking system also acknowledges the disproportionately negative impact of these social determinants on the health of the poor, vulnerable, and underserved in our communities. This will allow UofL Hospital to best address disparities in health.

The descriptions on the following pages provide the methods used to score each health need according to the six prioritization factors. To achieve consistency across community partners and to identify opportunities for cross-community collaboration, we chose to identify our priorities as named in this model.

1. Magnitude: How many people in the community are personally affected by this health need?

Rankings for this factor were based on the magnitude of the health need, or how many residents in the community served were personally affected by health measure. Each health measure was ranked in descending order by the percentage of the population whose personal health was impacted by that measure. The health measure was then linked to one of the 13 categories on the County Health Rankings model and given a score of zero to 13, with 13 being the highest score and indicating the area with the greatest need.

Percentage of Jefferson County, KY Residents Impacted by Health Needs (2018)				
<i>Health Measure</i>	<i>% of Population</i>	<i>Health Category</i>	<i>Rank of Importance</i>	<i>Score</i>
Excessive Drinking Rate ¹	19%	Alcohol and Drug Use	1	13
Adult Smoking Rate ¹	19%	Tobacco Use	2	12
Food Insecurity ¹	16%	Diet and Exercise	3	11
Severe Housing Problems ¹	15%	Housing and Transit	4	10
Persons in Poverty ²	14%	Income	5	9
Persons Not Graduating High School ¹	12%	Education	6	8
Percent of Total Population who are persons under 18 in a Single Parent Household ¹	9%	Family and Social Support	7	7
Uninsured ¹	6%	Access to Care	8	6
Rate of Medicare Enrollees impacted by Preventable Hospital Stays ¹	6%	Quality of Care	9	5
Unemployment ¹	4%	Employment	10	4
Newly-Diagnosed Chlamydia Infection Rate ¹	4%	Sexual Activity	11	3
Percent of Population Impacted by Violent Crime ¹	1%	Community Safety	12	2
Percent of Population Impacted by Drinking Water Violations ¹	0%	Air & Water Quality	13	0
Sources: County Health Rankings (2019) ¹ and United States Census Bureau QuickFacts (2017) ²				

2. Mortality (Length of Life): How is this health need related to the leading causes of death in this community?

Rankings for this factor were based on risk of mortality associated with this health category by reviewing the Centers for Disease Control and Prevention’s *15 Underlying Causes of Death* in the community for the most recent year available as of this writing (2017). The leading causes of death were ranked in order at the top of the chart and given one point as they related to the different health categories. For our purposes, a health measure was defined as being related to a leading cause of death if there is an established causal and/or correlating relationship between the two. The number of linkages to the leading causes of death (indicated by the number of points) was totaled for each health measure and given a score of zero to 13, with 13 being the highest score and indicating the area with the greatest need.

Leading Causes of Death and Correlating Health Factors—Jefferson County (2018)																		
Health Measure	#1: Cancers	#2: Diseases of the Heart	#3: Accidents	#4: Chronic Lower Respiratory Disease	#5: Cerebrovascular Diseases	#6: Alzheimer’s Disease	#7: Diabetes	#8: Nephritis, nephrotic syndrome and nephrosis	#9: Influenza and Pneumonia	#10: Septicemia	#11: Suicide	#12: Chronic liver disease and cirrhosis	#13: Assault (Homicide)	#14: Parkinson’s Disease	#15: Essential hypertension and hypertensive renal disease	Cumulative	Rank	Score
Diet and Exercise	1	1		1	1	1	1	1	1						1	9	1	13
Alcohol and Drug Use	1	1	1		1			1			1		1	1		8	2	12
Tobacco Use	1	1		1	1	1			1						1	7	3	11
Quality of Care	1	1							1	1						4	4	10
Access to Care	1	1									1					3	5	9
Air & Water Quality	1			1										1		3	6	8
Community Safety			1										1			2	7	7
Family & Social Support		1									1					2	8	6
Sexual Activity	1							1								2	9	5
Income													1			1	1	4
Housing & Transit	1															1	11	3
Education																0	0	0
Employment																0	0	0

Source: Centers for Disease Control and Prevention, National Center for Health Statistics (2017)

3. Morbidity (Quality of Life): How does this need relate to this community's quality of life data?

Rankings for this factor were determined by reviewing the quality of life metrics as determined by the Robert Wood Johnson Foundation *County Health Rankings* data. Each quality of life metric was listed along with each of the 13 health categories. One point was given if there is a causal and/or correlating relationship between the quality of life metric and the health category. The number of linkages for each health category was totaled and ranked by number of points. Each category was then given a score of zero to 13, with 13 being the highest score and indicating the area with the greatest need.

Impact of Health Factors on Quality of Life in Jefferson County, KY (2011-2017)								
Health Measure	# of Poor Physical Health Days	# of Poor Mental Health Days	Diagnosed HIV	Diagnosed Diabetes	Low Birthweight	Cumulative	Rank	Score
Access to Care	1	1	1	1	1	5	1	13
Quality of Care	1	1	1	1	1	5	2	12
Alcohol and Drug Use	1	1	1		1	4	3	11
Diet and Exercise	1	1		1	1	4	4	10
Tobacco Use	1	1			1	3	5	9
Community Safety	1	1				2	6	8
Family & Social Support	1	1				2	7	7
Sexual Activity			1			1	8	6
Air & Water Quality	1					1	9	5
Housing & Transit	1					1	10	4
Education						0	0	0
Employment						0	0	0
Income						0	0	0

Source: County Health Rankings (2019)

4. Trends: How does the measure of this health need compare to previous years in this community?

Rankings for this factor reflected the need to assess progress made toward improved community health since the previous CHNA. Health behaviors indicative of the 13 health measures were collected from the Robert Wood Johnson Foundation *County Health Rankings* to compare the community's 2019 health rankings to its 2015 health rankings (when this community data was last gathered for the previous CHNA).

Trends were described as "Worse," "Same," or "Better" with respect to the previous CHNA. Areas were ranked with the greatest trend toward worse health were ranked highest in importance. Each category was then given a score of zero to 13, with 13 being the highest score and indicating the area with the greatest need.

Jefferson County Health Trends: County Health Rankings Trends 2015 to 2018						
Health Measure	Health Behavior	2015 CHR Data	2019 CHR Data	Trend	Rank of Importance	Score
Alcohol and Drug Use	Excessive Drinking	15%	19%	Worse	1	13
Community Safety	Violent Crime Rate Per 100,000 Residents ¹	579	612	Worse	2	12
Sexual Activity	Chlamydia Infections Per 100,000 Population	676	684	Worse	3	11
Housing & Transit	Severe Housing Problems	15%	15%	Same	4	10
Family & Social Support	Children in Single Parent Households	42%	41%	Better	5	9
Diet and Exercise	Food Insecurity	17%	16%	Better	6	8
Quality of Care	Preventable Hospital Stays Per 100,000 Medicare Enrollees	6,700	5,633	Better	7	7
Income	Children in Poverty	22%	20%	Better	8	6
Access to Care	Uninsured Rate	16%	6%	Better	9	5
Tobacco Use	Adult Smoking	23%	19%	Better	10	4
Employment	Unemployment	8%	4%	Better	11	3
Air & Water Quality	Air Pollution—Particulate Matter	13.5	12.9	Better	12	2
Education	High School Graduation	77%	88%	Better	13	1
Source: County Health Rankings and Roadmaps (2015 and 2019)						

5. Importance to the Community: Was this need identified as a priority by the community served?

Rankings for this factor were based on the primary data collected for community input. Four questions on the community input survey asked about health needs. Each survey response was linked to one of the 13 categories on the *County Health Rankings* model. If multiple responses were linked to the same category, the number of responses was combined for a cumulative number of responses for each health category. Each health category was in importance by the number of cumulative responses in that area. Each category was then given a score of zero to 13, with 13 being the highest score and indicating the area with the greatest need.

Health Needs Identified by Community in Jefferson County (2018)				
Corresponding Question from Survey	Answer on Survey	Number of Responses	Associated Health Measure	Cumulative Responses for Each Health Category
What does your community need to work on?	Drug abuse	2170	Alcohol and Drug Use	5530
	Distracted driving	1365	Community Safety	2520
	Poor eating habits	1155	Diet and Exercise	5180
	Alcohol abuse	1120	Alcohol and Drug Use	
	Tobacco abuse	1120	Tobacco Use	1120
What do our communities need to be healthy?	Access to health care	1225	Access to Care	2520
	Access to affordable fresh food	1190	Diet and Exercise	
	Good schools	1155	Education	1155
	Good jobs	1155	Employment	1155
What are the most important health outcomes?	Addiction	2240	Alcohol and Drug Use	
	Obesity	1225	Diet and Exercise	
	Gun violence	1155	Community Safety	
	Mental health	910	Access to Care	
	Heart disease	805	Diet and Exercise	
Other Challenges	Social Isolation	980	Family & Social Support	980
	Cannot afford food	805	Diet and Exercise	
	Poor housing conditions	665	Housing & Transit	1155
	Do not have or are worried about losing housing	490	Housing & Transit	
	Do not have health insurance	385	Access to Care	
Source: Louisville Metro Department of Public Health and Wellness Community Health Assessment (2018)				

Rank of Health Needs by Community Input (2018)		
<i>Health Measure</i>	<i>Ranking of Importance</i>	<i>Score</i>
Alcohol and Drug Use	1	13
Diet and Exercise	2	12
Community Safety	3	11
Access to Care	4	10
Housing and Transit	5	9
Education	6	8
Employment	7	7
Tobacco Use	8	6
Family and Social Support	9	5
Income	0	0
Quality of Care	0	0
Sexual Activity	0	0
Air & Water Quality	0	0
Source: Louisville Metro Department of Public Health and Wellness Community Health Needs Assessment (2018)		

6. Alignment: How closely does this need align with overall strategic efforts?

Rankings for this factor were determined by evaluating current efforts at UofL Hospital and with UofL Physicians. Based on the section of this report “Evaluation of Impact,” there is considerable work being done in the areas of substance use and violence prevention, which correspond to the health categories “Alcohol and Drug Use” and “Community Safety,” respectively. As a hospital, striving for the good quality of care is a strategic goal. With an increasing link to UofL Physicians and goals around increasing capacity, improving access to care throughout the health care delivery model are goals.

In terms of other goals, tobacco use and educating about its impact on cancers is part of the work at the UofL Hospital Brown Cancer Center. Finally, UofL Hospital does have established social support networks through the work of the various service line support groups, which relates to the “Family and Social Support” category.

UofL Hospital currently does not have efforts that support the community at large in terms of the other health categories.

Health Measures Related to Strategic Alignment (2018)	
<i>Health Measure</i>	<i>Score</i>
Alcohol and Drug Use	13
Community Safety	12
Quality of Care	11
Access to Care	10
Tobacco Use	9
Family & Social Support	8
Diet and Exercise	0
Sexual Activity	0
Education	0
Employment	0
Income	0
Air & Water Quality	0
Housing & Transit	0
Source: UofL Hospital	

Prioritization of Community Health Needs

Below is the chart of each health measure's ranking according to each priority. The total score, as indicated on the previous charts, is listed here. The weighted score is the multiplication of the total score by the measure of influence on overall health outcomes, as described by the Robert Wood Johnson *County Health Rankings* model. A total score and a weighted score are both provided. The health needs with the top two highest weighted scores are highlighted in yellow.

Prioritization of Community Health Needs: UofL Hospital											
Health Factor	Measure	Prioritization Factors						Total Score	Measure of Influence	Weighted Score	
		Magnitude	Mortality	Morbidity	Trend	Importance to the Community	Alignment				
Health Behaviors	Tobacco Use	12	11	9	4	6	9	51	30%	15.3	
	Diet and Exercise	11	13	10	8	12	0	54	30%	16.2	
	Alcohol and Drug Use	13	12	11	13	13	13	75	30%	22.5	
	Sexual Activity	3	5	6	11	0	0	25	30%	7.5	
Clinical Care	Access to Care	6	9	13	5	10	10	53	20%	10.6	
	Quality of Care	5	10	12	7	0	11	45	20%	9	
Social and Economic Factors	Education	8	0	0	1	8	0	17	40%	6.8	
	Employment	4	0	0	3	7	0	14	40%	5.6	
	Income	9	4	0	6	0	0	19	40%	7.6	
	Family & Social Support	7	6	7	9	5	8	42	40%	16.8	
	Community Safety	2	7	8	12	11	12	52	40%	20.8	
Physical Environment	Air & Water Quality	0	8	5	2	0	0	15	10%	1.5	
	Housing & Transit	10	3	4	10	9	0	36	10%	3.6	

Identification of Significant Community Health Needs

Final Priorities Identified by Hospital Leadership

We have chosen to identify our priorities as named in the Robert Wood Johnson *County Health Rankings* report in order to use consistent naming conventions for community health terms.

The hospital's Community Strategy Steering Committee discussed the process for assessing needs and determined these areas should be brought to the Board of Directors for Approval as the FY2020-2022 community health needs assessment priority areas:

- **Alcohol and Drug Use**
 - The data in the health needs prioritization chart showed alcohol and drug use to have the highest total score and the highest weighted score when controlling for measure of influence. As a health behavior, alcohol and drug use impacts about 30% of health outcomes and demonstrates the hospital working further upstream to address health issues. Substance use disorder continues to present itself as a major concern in the community and the hospital has already dedicated resources to addressing this need. Continuing to address substance use in this CHNA time frame will allow UofL Hospital to expand on work that began in the previous CHNA time period.
- **Community Safety**
 - The data in the health needs prioritization chart showed community safety to have the third highest total score, but the second highest weighted score when controlling for measure of. As a social and economic factor, community safety impacts about 40% of health outcomes and demonstrates the hospital is trying to address a true root cause of poor health outcomes. UofL Hospital is already deeply involved in community safety efforts from the previous CHNA time period and would like to realize the impact of a long-term commitment to violence reduction.

The intervention strategies used to address these needs will be detailed in the FY2020-2022 Implementation Strategies document, which will be made publicly available on or before November 15, 2019.

Needs Not Addressed

UofL Hospital addressed the top two significant needs as determined by an assessment of multiple data sources. All health categories as outlined by the *County Health Rankings* were assessed for impact on community health and were not found to be significant health needs. Although these needs were not deemed to be significant for this community, below are specific reasons why each was not listed as a significant need and would not be addressed.

- **Tobacco Use**
 - The data in this category did not indicate this area was as high a need as the priority health needs chosen in the previous section, although this area did rank higher than others. This is not an area for intervention in the Implementation Strategies report due to the many tobacco cessation programs already in the community.
- **Diet and Exercise**
 - The data in this category did not indicate this area was as high a need as the priority health needs chosen in the previous section, although this area did rank higher than others. This is not an area for

intervention in the Implementation Strategies report due to more appropriate community organizations already working on interventions in this area.

- Sexual Activity
 - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to lack of significant need.
- Access to Care
 - The data in this category did not demonstrate that this was area of need for this community. Although this is area where intervention from the hospital is feasible, the lack of demonstrated need by the data analysis means this need will not be addressed in the Implementation Strategies report.
- Quality of Care
 - The data in this category did not demonstrate that this was area of need for this community. Although this is area where intervention from the hospital is feasible, the lack of demonstrated need by the data analysis means this need will not be addressed in the Implementation Strategies report.
- Education
 - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and lack of significant need.
- Employment
 - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and lack of significant need.
- Income
 - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact.
- Family and Social Support
 - The data in this category did not indicate this area was as high a need as the priority health needs chosen in the previous section, although this area did rank higher than others. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and because many community organizations already work to address social isolation.
- Air and Water Quality
 - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and the lack of significant need.
- Housing and Transit
 - The data in this category did not demonstrate that this was area of need for this community. This area was not chosen for intervention in the Implementation Strategies report due to the lack of feasible opportunities for impact and lack of significant need.

Potentially Available Resources in Community

The availability of health care resources is critical to the health of a county's residents and addressing health needs, including those identified in this assessment. Additionally, collaboration is key for effective intervention, so the list below highlights a few resources which are potentially-available to address the significant health needs identified in this report.

Significant Health Need: Alcohol and Drug Use

Resources available to address this health need include:

- Louisville Metro Department of Public Health and Wellness
 - LMPHW released an addiction response plan in 2018 entitled "Hope, Healing and Recovery: Louisville's Plan to Address Substance Use Disorder." They are spearheading many addiction response efforts in Louisville, including the local syringe exchanges.
- Centerstone
 - This local partner provides peer support specialists to UofL Hospital who can help engage patients with substance use disorder in deciding to accept an appropriate treatment option.
- Kentucky Opioid Response Effort (KORE)
 - KORE was born out of the Kentucky Cabinet for Health and Family Services and is designed to implement targeted response to the opioid crisis.
- The Healing Place and Stepworks
 - Both of these agencies provide treatment for substance use disorder.

Significant Health Need: Community Safety

Resources available to address this health need include:

- Mayor's Office for Safe and Health Neighborhoods (OSHN)
 - This department of Louisville Metro Government has been a partner with UofL Hospital and a funder for the hospital violence intervention network.
- Office of Victims of Crime
 - The Victims of Crime Act (VOCA) has provided funding for programs that interrupt cycles of violence and has been supportive of screenings related to intimate partner and domestic violence.
- Louisville Metro Police Department (LMPD)
 - UofL Hospital currently receives data from LMPD to ascertain a better understanding of the data related to gun violence, which allows the hospital to tailor intervention initiatives to the need, according to data.

Evaluation of Impact

The following section describes the evaluation of impact of the previous community health needs assessment conducted by UofL Hospital in 2013 to cover FY2014-16.

Needs Identified in FY 2017-2019 CHNA and Impact of Actions

The health needs addressed in UofL Hospital's FY2017-2019 CHNA included: Alcohol and Drug Use; Tobacco Use; Diet and Exercise; Access to Care; and Community Safety. The hospital's goals and strategies for addressing these health needs are evaluated below.

Goal: Address alcohol and drug use using both secondary and tertiary prevention responses, including working upstream to address the mental health issues that can underlie substance abuse.

- Brief Interventions
 - Two Trauma Social Workers were hired to provide brief interventions to patients with a traumatic injury who also had a positive toxicology screening for alcohol or illegal substances. In calendar year 2018, 425 patients were indicated for a brief intervention due to a positive alcohol screening. Of these patients, the Trauma Social Workers conducted 134 brief interventions and attempted an additional 66 interventions. Of the 134 patients, 41 accepted resources for treatment.
- Louisville Addiction Response Team
 - Multiple staff from UofL Hospital provided expertise and input to community workgroups convened by Louisville Metro Public Health and Wellness as it developed a community plan responding to the opioid epidemic. The resulting report, "Hope, Healing and Recovery: Louisville's Plan to Address Substance Use Disorder, was released in 2018. UofL Hospital's component of this action plan was connecting patients with substance use disorder to treatment and included the use of peer support specialists from Centerstone Addiction Recovery Center. As an example, UofL Hospital's Emergency Department contacted Centerstone for peer support services 35 times in February 2019.
- Kentucky Opioid Response Efforts
 - Two Addiction Program Social Workers were hired in April 2018 to link admitted patients with substance use disorder with appropriate treatment. In 2018, 602 patients were referred to the social workers. Of these patients, 27% (163 patients) accepted resources for substance abuse treatment. This means they had an appointment made at discharge for either inpatient, intensive outpatient, outpatient, or medication-assisted substance abuse treatment.

Goal: Improve tobacco cessation rates through education and offering of treatment resources.

- Patient Education
 - Adult smoking rates in Jefferson County decreased from 23% in 2015 (previous CHNA data point) to 19% in 2018. Patients were and still are educated about tobacco use, especially through the UofL Brown Cancer Center. There are tobacco cessation resources listed on the website, as well as through the M. Krista Loyd Resource Center (operated by the Brown Cancer Center). Patients can also work with trained counselors at the Kentucky Cancer program through the Plan to be Tobacco Free.

- Community Education
 - In addition to the above-mentioned resources, which are also available to the community at large, the UofL Brown Cancer Center conducted community events aimed at educating on tobacco use. In 2018, they conducted a “Plan to be Tobacco Free” class to pregnant women, which resulted in 50% of class participants ceasing to smoke.
 - For another community event in 2017, a mobile screening unit delivered a lung cancer prevention program focused on tobacco users. Of the 32 identified tobacco users, five were enrolled in the 1-800-QUIT-NOW services. Two were referred to a patient navigator and further screenings.
 - Community outreach efforts are monitored through UofL Brown Cancer Center’s Cancer Committee, which helps the cancer center meet national quality standards with the Commission on Cancer.

Goal: Address community safety through policy and advocacy.

- Advocate for funding of state-wide trauma system.
 - The UofL Hospital Trauma Institute has worked with the University of Louisville Assistant Vice President of Government Relations to advocate for the trauma system at a state-wide level, including funding for the state Committee on Trauma. Over the period covering the FY17-19 CHNA, this was not a priority area of the legislature for focus and funding.

Goal: Provide community education that promotes safety and decreases morbidity/ mortality.

- Trauma Center Education
 - The UofL Hospital Trauma Institute provided *Stop the Bleed* training to 1,861 people from July 2017-March 2019. This training is an ongoing injury prevention initiative dedicated to teaching bystanders the steps they can take to stop uncontrolled bleeding. Since uncontrolled bleeding is one of the major causes of preventable death due to a traumatic injury, this training is applicable for many types of injury that may lead to death without early intervention.

Goal 3: Route patients to services that can interrupt cycles of violence.

- Arise to Safety
 - Arise to Safety met the goal implementing universal domestic violence screenings for patients presenting in the Emergency Department. The four-question screening tool is a modified version of the Personal Violence Screen and assesses for safety. Approximately 60,000 people have been screened in the past year. Of these, 412 patients were seen for Intimate Partner Violence forensic exams. Anytime a patient screens through Arise to Safety as experiencing Intimate Partner Violence, a call is placed to the Center for Women and Families to send an advocate to UofL Hospital.
- Address human trafficking.
 - In February 2019, UofL Hospital began a new safety initiative directed at identifying victims of human trafficking and domestic violence known as “Red Dot for Safety.” All patient bathrooms are stocked with Red Dot stickers and signage that states, “UofL Hospital Cares about your well-being. If you are concerned about your safety after discharge and would like to speak to a staff member in private, please place a RED DOT sticker outside of your specimen cup. A staff member will arrange to speak to you privately to discuss your concerns.” Because this initiative just began, there is no data to evaluate.

- Pivot to Peace Intervention Network
 - This hospital-based violence intervention network links patients who are admitted to UofL Hospital with gunshot or stabbing injuries due to interpersonal violence with resources they need to help them recover and reduce the likelihood of re-injury. From October 2017-February 2019, 402 admitted patients met these criteria. Of these patients, 328 were rounded on by a Community Health Worker and 46% accepted community resources.
 - Trauma Social Workers also held weekly Trauma Support groups for patients and families.

Goal: Encourage the availability of healthy eating options.

- Provide healthy eating options.
 - The food service partner at UofL Hospital, Sodexo, has increased healthy food options (options are identified as “Mindful”) and has labeled all items with the caloric content for educational purposes.

Goal: Deepen partnerships with physicians.

- Partner with UofL Physicians group.
 - Beginning July 1, 2017, UofL Hospital transitioned its management from KentuckyOne Health back to University Medical Center. The executive teams from both organizations (UofL Hospital and UofL Physicians) are working close together to develop an improved referral process. In addition, for referrals within ULP, we have been educating team members and leaders on the various services and programs offered within ULP to encourage referrals and increased customer service for our patients. Utilizing our various communications tools and through presentations to leaders, we have increased the visibility of the programs within our organization.

Goal: Facilitate health and healthcare education and provide outreach to those who might not otherwise access health care.

- Outreach and Screenings
 - Many of the UofL Hospital service lines conduct health education in the community, including the Brown Cancer Center, the Trauma Institute, Stroke, Pharmacy, the Center for Women and Infants, and the Burn Center. In FY2018, UofL Hospital staff provided 1,035 hours of education at community health fairs.
- Residency Positions
 - There were over 242 physician residency positions funded by UofL Hospital. This post-graduate education is critical to developing physicians in Kentucky, especially considering the ratio of physicians to citizens, as described in the “Health Factors—Clinical Care” section of this report.

Evaluation of Written Comments

Feedback on the most recently-conducted CHNA and implementation strategy was solicited online. From June 30, 2016-June 30, 2017, this feedback was available via a link on the KentuckyOne Health website (<http://www.kentuckyonehealth.org/healthy-community-contact-us>).

From July 1, 2017-June 30, 2019, this feedback was solicited via a link on the UofL Hospital website (<https://uoflhospital.org/community-health-needs-assessment>).

Neither link received any written comments on the CHNAs or Implementation Strategies reports. Therefore, UofL Hospital solicited feedback with a readily-accessible tool but did not receive any written comments and thus had no opportunity to evaluate those comments.

Learning from Previous CHNA

This third cycle of the CHNA process lends itself as a learning opportunity to improve the CHNA process. There was a more concerted effort to get feedback from UofL Hospital patients and employees, as described in the “Primary Data Collection” section of this report. Additionally, the community survey was translated into five languages instead of only two, as was the case for the 2017-2019 CHNA report, to solicit feedback from a greater swath of the community. Finally, the community survey data was weighted to be representative of the Jefferson County demographics, a step not completed during the last CHNA.

Finally, the FY20-22 CHNA identifies a more specific scope of health needs than in previous reports, as was the trend with the first CHNA report into the second CHNA report. This narrower scope will allow UofL Hospital to focus resources dedicated to the community more effectively evaluate than when priority needs are broad and wide-ranging.

Next Steps

UofL Hospital will use the findings in this community health needs assessment to guide the coordinated efforts in addressing the identified health needs. This community health needs assessment will be made public and widely-available no later than June 30, 2019 on the UofL Hospital website at <https://uoflhospital.org/community-health-needs-assessment>.

The efforts to address these identified health priorities will be described in an accompaniment to this document known as the “University of Louisville Hospital FY2020-2022 Implementation Strategies.” This will be made public and widely-available no later than November 15, 2019.

Adoption/Approval

As an authorized body of University of Louisville Hospital, the University Medical Center Board of Directors approves and adopts this community health needs assessment on the date listed below.



4/24/2019

Chair, University Medical Center Board of Directors

Date



4/24/2019

Chief Executive Officer, University Medical Center, Inc.
DBA University of Louisville Hospital and James Graham Brown Cancer Center

Date

References

Center for Neighborhood Technology. (2018). *H+T Fact Sheet: County Jefferson, KY*. Retrieved April 1, 2019 from <https://htaindex.cnt.org/map/>.

Centers for Disease Control and Prevention, National Center for Health Statistics. (2019). *Underlying Cause of Death, 1999-2017 Results—Jefferson County, KY Leading Causes of Death (2014)*. Retrieved April 1, 2019 from <https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=F501C1CEAE78BEF111C0FF8E71D4CBA5>.

Johnson, Becky. "Health Needs Assessment." Message to Annabelle Pike. 15 March 2019. E-mail.

Kentucky Cabinet for Health and Family Services. (2019). *Inventory of Health Facilities and Services*. Retrieved April 1, 2019 from <https://chfs.ky.gov/agencies/os/oig/dcn/Pages/inventory.aspx>.

Kentucky Office of Drug Control Policy. (2018). *Overdose Fatality Report*. Retrieved on April 1, 2019 from [https://odcp.ky.gov/Documents/2017%20Kentucky%20Overdose%20Fatality%20Report%20\(final%20update\).pdf](https://odcp.ky.gov/Documents/2017%20Kentucky%20Overdose%20Fatality%20Report%20(final%20update).pdf).

Louisville Metro Department of Public Health and Wellness. (2018). *Community Health Needs Assessment*. Retrieved October 25, 2018 from https://louisvilleky.gov/sites/default/files/health_and_wellness/oppe_-_datareports/2018-09-11-chnafinalpresentation.pdf.

Robert Wood Johnson Foundation. (2019). *Kentucky 2015 Rankings: Jefferson County*. Retrieved April 1, 2019, from <http://www.countyhealthrankings.org/app/kentucky/2019/rankings/jefferson/county/outcomes/overall/snapshot>.

United States Census Bureau. (2017). *United States Quick Facts: Kentucky; Jefferson County, Kentucky; UNITED STATES*. Retrieved April 1, 2019 from <https://www.census.gov/quickfacts/fact/table/ky,jeffersoncountykentucky,US/PST045218>.