Licking Memorial Health Systems

2016 Community Health Needs Assessment
LMHS Exists to Improve the Health of the Community.
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Licking Memorial Hospital, which celebrated its centennial anniversary in 1998, remains responsive to the healthcare needs of the Licking County area that it has served for more than 100 years. The 227-bed facility offers a full spectrum of quality patient care services, from emergency medicine to home health care. In addition, Licking Memorial Hospital offers a number of specialized medical services unique for a Hospital of its size. Comprehensive services are available in areas such as cancer care, heart care, maternity services and mental health. Licking Memorial Health Systems’ mission is to improve the health of the community.

The Licking Memorial Health Professionals is a group of 100-plus physicians in various practices. Physician offices are located throughout Licking County – including Granville, Hanover, Heath, Hebron, Johnstown, Newark and Pataskala.

The Licking Memorial Health Foundation is supported by the Development Council, which has various committees consisting of business leaders in Licking County. The Foundation is the fundraising and resource development organization for Licking Memorial Health Systems.

The Licking Memorial Health Systems staff consists of more than 2,000 employees. Physicians, nurses, pharmacists, respiratory therapists, cooks, environmental services staff, accountants, engineers, computer specialists, laboratory technicians, administrators and many others work diligently together to provide the best care for patients and visitors.
Licking Memorial Hospital is located at 1320 West Main Street in Newark, where all inpatient services are provided. Approximately one mile from the main Hospital location is Licking Memorial Hospital – Tamarack, located at 2000 Tamarack Road, also in Newark. This location serves outpatients, including outpatient specialty clinics, outpatient surgery and laboratory draw services. In addition, two Urgent Care facilities are available, including Licking Memorial Urgent Care – Pataskala, located at One Healthy Place in Pataskala and Licking Memorial Urgent Care – Granville, located at 14 Westgate Drive in Granville. Beginning January 2017, a new Urgent Care location will be available to the community at 20 West Locust Street in Downtown Newark.

Licking Memorial Hospital’s “community served” is identified as residents of Licking County, which includes the following areas:

<table>
<thead>
<tr>
<th>Licking County Municipality and ZIP Code(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandria – 43001</td>
<td>Johnstown – 43031</td>
</tr>
<tr>
<td>Buckeye Lake – 43008</td>
<td>Kirkersville – 43033</td>
</tr>
<tr>
<td>Granville – 43023</td>
<td>Newark – 43055, 43058, and 43093</td>
</tr>
<tr>
<td>Gratiot – 43740</td>
<td>Pataskala – 43062</td>
</tr>
<tr>
<td>Hanover – 43055</td>
<td>Saint Louisville – 43071</td>
</tr>
<tr>
<td>Heath – 43056</td>
<td>Utica – 43080</td>
</tr>
<tr>
<td>Hebron – 43025</td>
<td>Other non-municipalities – 43011, 43013, 43018, 43046, 43068, 43076, 43147, 43721, 43739, 43760, 43822, and 43830</td>
</tr>
</tbody>
</table>

Source: Zip-codes.com, October, 2016: Zip code data base

The “community served” has been determined to be the entire community and residents of Licking County.

<table>
<thead>
<tr>
<th>Calendar Reporting Year</th>
<th>Total Hospital Admissions</th>
<th>Total Hospital Admissions from Licking County</th>
<th>Percent of Total Hospital Admissions from Licking County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>9,149</td>
<td>7,997</td>
<td>87.4%</td>
</tr>
<tr>
<td>2014</td>
<td>9,157</td>
<td>8,097</td>
<td>88.4%</td>
</tr>
<tr>
<td>2013</td>
<td>8,811</td>
<td>7,710</td>
<td>87.5%</td>
</tr>
<tr>
<td>2012</td>
<td>9,187</td>
<td>8,069</td>
<td>87.8%</td>
</tr>
<tr>
<td>2011</td>
<td>7,843</td>
<td>6,891</td>
<td>87.9%</td>
</tr>
</tbody>
</table>

Source: Licking Memorial Hospital Registration Reports

Written comments regarding Licking Memorial Health Systems’ 2016 Community Health Needs Assessment may be directed to the Director of Quality Management at PublicRelations@LMHealth.org. All written comments will be reviewed and addressed with the commenter as appropriate. We welcome feedback from our community regarding the contents of this Assessment.
To develop this report, the Health Needs and Prioritization Committee convened to identify significant health needs in the Licking County community, utilizing several sources of information to ascertain patterns and trends of health conditions, health behaviors, and resource utilization within the Licking County community.

Information and data was collected from numerous sources, including local and state health departments, The Centers for Disease Control (CDC), community health blueprints, health behavior surveys, and internal hospital utilization data. Key data sources used to identify health disparities/priorities in the Licking County community included:

- Licking Memorial Health Systems Community Health Needs Assessment Report 2013
- Licking County Health Department – Network of Care website – 2016
- Ohio Department of Health, Office of Vital Statistics 2012-2014
- Robert Wood Johnson Foundation’s County Health Rankings and Roadmaps 2016 (Ohio)
- Licking County Community Blueprint Steering Committee – 2015 Community Blueprint Research Report
- Licking County Health Department – 2015 Licking County Behavior Risk Factor Surveillance Survey (BRFSS) Report
- Ohio Department of Health – 2014 Ohio Infant Mortality Data: General Findings Report
- Patterns/Trends/Results and Associated Analysis from Licking Memorial Health Systems Quality Indicators and Patient Utilization/Health Trends

The Health Needs and Prioritization Committee convened numerous times throughout 2016 to assess the significant health needs of the community, prioritize those significant health needs, and identify potential measures and resources made available (or to be made available) to address the community health needs identified. This Committee includes key members of Licking Memorial Hospital’s senior leadership team, as well as members of the hospital’s Process Improvement Center.

To identify community needs, the Committee members considered the following questions:

- As a health system, do we have control over this community health need?
- Can we effect meaningful change regarding this need?
- How does the Licking County community compare to state and federal benchmarks?
- Is there an adverse trend in this health need?
- Is this health need identified as a problem across multiple sources?

To prioritize the community health needs identified, the Committee members considered the following:

- The size of the population affected by this need
- The severity of this need
- Ability to evaluate the outcome of efforts to positively impact this need
- Whether the community is currently addressing this need
- Whether addressing this need will impact other needs identified
- Impact of addressing this need on systems or health within the community
- The cost of addressing the need
Prioritized Health Needs

The following are the prioritized health needs for the Licking County Community identified by the Health Needs Assessment and Prioritization Committee as well as information related to existing health care resources and other resources within the community available to meet the need:

Identified Need: Reduce Drug Abuse

1. Binge drinking (adults) – defined as the percentage of adults that report binge drinking.

   • Ohio 2006-2012: 17.4%
   • Licking County 2006-2012: 19.5%

   Source: Licking County Health Department – Network of Care website – 2016

2. Excessive drinking (adults) – defined as the percentage of adults that report excessive drinking, either chronic high alcohol consumption or binge drinking.

   • Ohio 2006-2012: 18.4%
   • Licking County 2006-2012: 20.1%

   Source: Licking County Health Department – Network of Care website – 2016

3. Unintentional drug overdose deaths – defined as the age-adjusted death annual death rates, per 100,000 population

   • Ohio 2010-2015: 19.2 deaths per 100,000 residents
   • Licking County 2010-2015: 13.5 deaths per 100,000 residents.

   Source: Ohio Department of Health “Healthy Ohio” Website, 2015 Ohio Drug Overdose Data full report - 2016
Reduce Drug Abuse

Potential Measures and Resources to Meet this Need:

• Collaboration with the local police department in support of the Newark Addiction Recovery Initiative (NARI) for community members suffering from drug addiction to turn themselves in to be evaluated at LMH for treatment
• Offer drug abuse treatment services, including the availability of addictionologists
• Continue collaboration with community partners specializing in this disease in support of LMH Suboxone program
• Participation in United Way’s Community Blueprint Committees to continue work on “Promoting a healthy community that effectively addresses addiction” — the focus of work is education and awareness of the multitude of resources available in Licking County
• Continued support of the “Our Futures in Licking County” initiative to reduce the use/abuse of marijuana, alcohol, tobacco, and other drugs by youth and adults
• Maintain availability of the current program in which community members can have free “Q&A” sessions with an addictionologist during posted program times

Potential Collaborating Partners to Address the Need:

Our Futures in Licking County
Mental Health and Recovery for Knox and Licking County
Behavioral Health Partners
Licking County Health Department
Licking Memorial Health Professionals
Community Health Clinic
Local School Districts
Addressing Mental Health Issues

Identified Need: Addressing Mental Health Issues

1. Mentally unhealthy days – defined as the average number of reported mentally unhealthy days per month among adults aged 18 or older.

- Ohio 2006-2012: 3.8 days
- Licking County 2006-2012: 3.6 days

Source: Licking County Health Department – Network of Care website – 2016

2. Suicide age-adjusted death rate – defined as the age-adjusted death rate per 100,000 population due to suicide. Lower numbers are better.

- Ohio 2009-2011: 12 deaths per 100,000 residents
- Licking County 2009-2011: 15.7 deaths per 100,000 residents

Source: Licking County Health Department – Network of Care website – 2016

Potential Measures and Resources to Meet this Need:

- Provide psychiatric and counseling services for both behavioral and substance abuse needs
- Coordinate closely with other area behavioral and mental health providers, to include leasing space for community mental health providers in the Emergency Department to increase access/options for community members to receive comprehensive services
- Actively participate in United Way’s Community Blueprint Committee’s identified priority of, “Promoting a healthy community that effectively addresses mental health” – work focuses on education and awareness of the many mental health resources available to Licking County residents

Potential Collaborating Partners to Address the Need:

- Our Futures in Licking County
- Mental Health and Recovery for Knox and Licking County
- Behavioral Health Partners
- Licking County Health Department
- Licking Memorial Health Professionals
- Community Health Clinic
- Local School Districts
Identified Need: Cancer Mortality Reduction

Colon Cancer Mortality Reduction

1. Colon cancer deaths (age-adjusted) per 100,000 people – defined as the number of deaths due to colon cancer per 100,000 population, adjusted for age.

- Ohio 2008-2012 – 17.0 deaths per 100,000 people
- Licking County 2008-2012 – 18.4 deaths per 100,000 people

Source: Licking County Health Department – Network of Care website - 2016

2. Patients over 50 years of age with no sigmoidectomy/colonoscopy – defined as the percentage of county residents over the age of 50 that have not had a sigmoidectomy/colonoscopy.

- National 2015: 32.7%
- Ohio 2015: 35.0%
- Licking County: 30.2%

Source: 2015 Behavioral Risk Factor Surveillance Survey Report, Licking County Health Department

Potential Measures and Resources to Meet this Need:

- Improve access to colon cancer screenings through the addition of gastroenterologists, expanding appointment availability, and the adoption of Cologuard as an option for low-risk patients who are reluctant to undergo a colonoscopy procedure
- Track performance/compliance of patients obtaining screening colonoscopies
- Community education regarding the importance of timely screening, to include mass mailings and community education programs
- Promote availability of Cologuard for those low-risk patients who are averse to undergoing colonoscopy
- Monitor provider to patient ratios, appointment wait times and other quality metrics to determine the need for additional resources in the community
Cancer Mortality Reduction

Breast Cancer Mortality Reduction

1. Breast cancer deaths (age-adjusted) per 100,000 people – defined as the number of patient deaths due to breast cancer per 100,000 population. Lower numbers are better.

   - Ohio 2008-2012 – 23.6 deaths per 100,000 people
   - Licking County 2008-2012 – 22.9 deaths per 100,000 people
   
   Source: Licking County Health Department – Network of Care website - 2016

2. Mammogram: Women 50+ – defined as the percentage of women aged 50 or older that report a mammogram in the past 2 years.

   - Ohio 2006-2012: 78.1%
   - Licking County 2006-2012: 80.7%

   Source: Licking County Health Department – Network of Care website – 2016

Potential Measures and Resources to Meet this Need:
Licking Memorial Hospital has adopted new mammography imaging technology with greater levels of sensitivity – all mammograms are now being performed with Tomosynthesis. This newly adopted technology promotes earlier detection of cancers in women undergoing mammograms, allowing treatment earlier in the disease.

   - Offer free screening mammogram days for patients without health insurance, as well as collaborates with the SASS program
   - Maintain an active partnership with the American Cancer Society, including ACA participation in cancer-related committees/decision-making
   - Offer community education programs on breast cancer, to include complimentary breast screenings
   - Continue efforts to decrease the overall wait time for Licking Memorial Hospital patients when being screened and diagnosed with potential breast cancers, with a focus on expediting confirmatory testing, biopsy testing, and surgical interventions
Cancer Mortality Reduction

Lung Cancer Mortality Reduction

1. Late Stage Lung Cancer Diagnosis (Stage IV): Non-Small Cell Carcinoma – defined as the percentage of lung cancer cases diagnosed at the latest stage (non-small cell carcinoma only).

   - National 2013 – 40%
   - LMH 2013 – 44%
   Source: American College of Surgeons, NCDB database comparative benchmark reports

2. Late Stage Lung Cancer Diagnosis (Stage IV): Small Cell Carcinoma – defined as the percentage of lung cancer cases diagnosed at the latest stage (small cell carcinoma only).

   - National 2013 – 60%
   - LMH 2013 – 42%
   Source: American College of Surgeons, NCDB database comparative benchmark reports

3. Lung and Bronchus Cancer Age-Adjusted Death Rate – defined as the rate of death due to lung cancer per 100,000 population. Lower numbers are better.

   - Ohio 2008-2012: 55.3
   - Licking County 2008-2012: 62.9
   Source: Licking County Health Department – Network of Care website – 2016
Cancer Mortality Reduction

Potential Measures and Resources to Meet this Need:

• Provide access to new low-dose CT scanning that can be used for patients at high risk for lung cancer to promote earlier identification of lung cancers before patients become symptomatic.

• Continue to develop a formal low dose CT program, to include a navigator position to provide education and follow up with the patients to assure appropriate follow up is being completed.

• Continue participation in the ACR lung cancer screening registry in order to monitor trends in performance versus national averages, using this data to develop action plans to improve performance as appropriate.

• Continue to maintain robust Smoking Cessation programs to include Quit for Your Health (adults), Quit for You, Quit for Your Baby (pregnant mothers), access at Shepherd Hill (patients suffering from addictions), and other various programs and locations throughout Licking County.

• Provide smoking cessation education both to patients in the hospital as well as in the patient’s home as needed.

• Community education programs on lung cancer are provided on an annual basis to help educate the community on risk factors, symptoms, and treatment of lung cancer.

Potential Collaborating Partners to Address the Need:

Licking County Health Department
Licking Memorial Health Professionals
Newark Advocate
Community Health Clinic
Identified Need: Reduce Infant Mortality

1. A review of infant deaths by the Ohio Department of Health found that deaths were related to the following reasons:
   - Prematurity/Pre-Term: 46.6%
   - Birth Defect: 13.8%
   - Sleep Related: 15.0%
   - Other Causes: 24.6%

2. Infant mortality 2014 – defined as the number of deaths per 1,000 live births. Lower numbers are better.
   - Licking County 2014: 6.2 deaths per 1,000 births
   - Ohio 2014: 6.8 deaths per 1,000 births
   - National 2014: 6.0 deaths per 1,000 births

3. Infant deaths within First 28 days of life. Lower numbers are better.
   - National 2004-2010: 4.6
   - State 2004-2010: 5.2
   - Licking County 2004-2010: 4.6
   Source: Licking County Health Department – Network of Care website – 2016

4. Infant deaths between 28 days - 1 year – defined as the number of postneonatal deaths between 28 days and 1 year of life. Lower numbers are better.
   - National 2004-2010: 2.3
   - State 2004-2010: 2.6
   - Licking County 2004-2010: 2.2
   Source: Licking County Health Department – Network of Care website – 2016
5. Very low birth weight babies – defined as the number of live births with a birth weight of less than 3lbs 4oz.

- National 2006-2012: 1.5%
- State 2006-2012: 1.6%
- Licking County 2006-2012: 1.7%

Source: Licking County Health Department – Network of Care website – 2016

Potential Measures and Resources to Meet this Need:
- Provide “Safe Sleep” education to all new parents in an effort to ensure they are knowledgeable about the risks of Sudden Infant Death Syndrome (SIDS) and precautions they can take to protect their newborns
- Use “Safe Sleep Sacks” for all newborn babies and those admitted to the hospital nursery – Safe Sleep Sacks are also provided to every newborn at the time of discharge
- All newborns receive an “onesie” that states “This Side Up” to promote safe sleep at home
- Designated as a “Baby Friendly” hospital. Implemented initiatives intended to promote best practices in infant feeding and bonding – breastfeeding has been shown to reduce infant morbidity
- Smoking cessation programming available at Women’s Health Services – Reduction in maternal smoking can reduce the likelihood of low birth weights and improve infant mortality
- Maintain a Suboxone Clinic specifically targeting pregnant mothers suffering from addiction – Intended to reduce the number of newborns suffering from drug addiction at birth and its associated complications
- Maintain a Level II Special Care Nursery on site to provide immediate and ongoing care to infants with critical needs
- Senior Leadership serves as an active member of the Licking County Coroner’s Child Fatality Review Board that reviews all infant deaths and discusses opportunities to reduce infant death rate

Potential Collaborating Partners to Address the Need:
Licking County Health Department
Licking Memorial Health Professionals
Community Health Clinic
Ohio Hospital Association
Identified Need: Reduce Tobacco Usage

1. Adult smoking – defined as the percentage of adults that are current smokers.
   - Ohio 2013: 21.7%
   - Licking County 2015: 24%
   Source: 2015 Licking County Behavioral Risk Factor Surveillance Survey Report

2. Percentage of pregnant women referred to tobacco cessation program – defined as the percentage of pregnant women who smoke referred to the LMH Quit for You, Quit for Your Baby program or other smoking cessation program.
   - LMHS 2015: 87%
   - Target: >90%
   Source: Internal quality data, Licking Memorial Hospital

Potential Measures and Resources to Meet this Need:
- Quit For Your Health Program – provides counseling and smoking cessation support, including nicotine replacement therapy, to all interested community members free of charge
- Program has been expanded and enhanced to include the Quit for You, Quit for Your Baby initiative, focusing on addressing and reducing tobacco utilization in pregnant mothers and reducing the potential for smoking-related birth complications and defects
- Additional expansion of this program includes the expansion of these services to the Shepherd Hill location and respiratory therapists who perform smoking cessation education in-home for high-risk patients
- Encourage employers to adopt smoke-free workplace policies and offer incentives to their staff to stop smoking

Potential Collaborating Partners to Address the Need:
- Licking County Health Department
- Licking Memorial Health Professionals
- Community Health Clinic
- American Red Cross of Licking County
- Pathways of Central Ohio /2-1-1
- Our Futures in Licking County
- Local School Districts Quit for Your Health program
Identified Need: Reduce Obesity

1. Adults who are obese – defined as the percentage of adults who are obese according to BMI.

   - CDC Target 2020: 30.5%
   - Licking County 2013: 31.4%
   Source: Licking County Health Department – Network of Care website – 2016

2. Physical Inactivity – defined as the percentage of adults aged 20 or older reporting no leisure-time physical activity.

   - Ohio 2012: 30%
   - Licking County 2012: 29%
   Source: Robert Wood Johnson Foundation’s County Health Rankings and Roadmaps 2016 (Ohio)
Potential Measures and Resources to Meet this Need:

- Active•Fit Youth Wellness Program – continue this award-winning program promoting healthy lifestyles, exercise, and diet choices among the youth of Licking County, in conjunction with other community health leaders
- Continue Active•Senior Adult Wellness Program
- Promote membership in the Licking County Wellness Coalition
- Increase awareness of diabetes education opportunities. Continue to provide diabetes education within the community, including intensive one-on-one education with licensed diabetes educators and complimentary community education programming
- Provide free diabetes screenings at community events
- Provide community education programming focused on healthier food choices, exercise, and good lifestyle habits
- Ongoing participation in, and promotion of, the Canal Market District to promote healthy food choices in the community, including healthy cooking demonstrations and a new “Healthy Food Prescriptions” program
- Wellness Center & CTEC equipped with exercise equipment for the general public to use
- Maintain the Walk with a Doc program
- Continue to serve as a host/sponsor for several and various running/walking marathons, golf outings, bowling programs, little league sports, area school sports programs in the promotion of healthy lifestyles and exercise

Potential Collaborating Partners to Address the Need:

Licking County Health Department
Licking Memorial Health Professionals
Newark Advocate
Ohio State University Extension – Newark Campus
Pathways of Central Ohio /2-1-1
Licking County YMCA
Data Sources & Demographics

Licking County Health Indicator Data Sources

Information gaps:
No information gaps were identified while conducting the community health needs assessment.

Information and Data Sources:
• Licking Memorial Health Systems Community Health Needs Assessment Report 2013
• Licking County Health Department – Network of Care website – 2016
• Ohio Department of Health, Office of Vital Statistics 2012-2014
• Robert Wood Johnson Foundation’s County Health Rankings and Roadmaps 2016 (Ohio)
• Licking County Community Blueprint Steering Committee – 2015 Community Blueprint Research Report
• Licking County Health Department – 2015 Licking County Behavior Risk Factor Surveillance Survey (BRFSS) Report
• Ohio Department of Health – 2014 Ohio Infant Mortality Data: General Findings Report
• Patterns/Trends/Results and Associated Analysis from Licking Memorial Health Systems Quality Indicators and Patient Utilization/Health Trends

Licking County Community Demographic Profile

Total Population

<table>
<thead>
<tr>
<th>Total Licking County Population – 2010</th>
<th>166,492</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Licking County Population – 2015</td>
<td>170,570</td>
</tr>
<tr>
<td>Percent Change from 2010 to 2015</td>
<td>+2.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts

Population by Age

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Total Population</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons under 5 years</td>
<td>10,234</td>
<td>6.0%</td>
</tr>
<tr>
<td>Persons 5-17 Years</td>
<td>30,021</td>
<td>17.6%</td>
</tr>
<tr>
<td>Persons 18-64 years</td>
<td>103,706</td>
<td>60.8%</td>
</tr>
<tr>
<td>Persons 65 years and over</td>
<td>26,609</td>
<td>15.6%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts

Population by Sex

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Population</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>86,820</td>
<td>50.9%</td>
</tr>
<tr>
<td>Male</td>
<td>83,750</td>
<td>49.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts
Demographic Profile

Population by Race

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Population</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
<td>158,118</td>
<td>92.7%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>6,652</td>
<td>3.9%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>512</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>1,535</td>
<td>0.9%</td>
</tr>
<tr>
<td>Other</td>
<td>171</td>
<td>0.1%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>3,582</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts

Population Characteristics

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterans, 2010 - 2015</td>
<td>13,987</td>
</tr>
<tr>
<td>Foreign-born persons, 2010-2015</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts

Housing

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Units – 2015 (includes houses, apartments, mobile homes, occupied rooms)</td>
<td>70,092</td>
</tr>
<tr>
<td>Owner-occupied housing unit rate, 2010-2015</td>
<td>72.1%</td>
</tr>
<tr>
<td>Median value, owner-occupied housing 2010-2015</td>
<td>$152,200</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts

Education

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduate or higher – Age 25+, 2010-2015</td>
<td>89.9%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher – Age 25+, 2010-2015</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau – www.census.gov/quickfacts

Income Demographics

<table>
<thead>
<tr>
<th>Description</th>
<th>Licking County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income – 2015</td>
<td>$56,549</td>
<td>$53,889</td>
</tr>
<tr>
<td>Percentage of children living below poverty level – 2014</td>
<td>26.2%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Percentage of families living below poverty level – 2014</td>
<td>10.1%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Percentage of people aged 65+ below poverty level – 2011</td>
<td>3.6%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Licking County Health Department Network of Care website – www.licking.oh.networkofcare.org
Licking County Health Indicator Data – County Health Status
### Health Demographics

#### Immunizations

<table>
<thead>
<tr>
<th></th>
<th>Licking County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu vaccination rate – adults aged 65+ – 2006-2012</td>
<td>74.1%</td>
<td>66.6%</td>
</tr>
<tr>
<td>Pneumonia vaccination rate – adults age 65+ – 2006-2012</td>
<td>75%</td>
<td>68.5%</td>
</tr>
</tbody>
</table>

*Licking County Health Department Network of Care website – www.licking.oh.networkofcare.org*

#### Maternal and Infant Health

<table>
<thead>
<tr>
<th></th>
<th>Licking County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality rate – per 1,000 live births – 2010-2014</td>
<td>7.2</td>
<td>7.5</td>
</tr>
<tr>
<td>Low birth weight deliveries</td>
<td>7.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Pre-term births</td>
<td>11.8%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Teen pregnancy rate (15-19 years) – 2010</td>
<td>5.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Mothers receiving early prenatal care</td>
<td>92.5%</td>
<td>86.7%</td>
</tr>
</tbody>
</table>

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#### Infectious Diseases - reported as number of cases per 100,000 population

<table>
<thead>
<tr>
<th></th>
<th>Licking County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported notifiable diseases – 2012</td>
<td>140.3</td>
<td>120.3</td>
</tr>
<tr>
<td>Pertussis (whooping cough) infection rate – 2013</td>
<td>48.1</td>
<td>12.7</td>
</tr>
<tr>
<td>Chickenpox (Varicella) infection rate – 2012</td>
<td>14.3</td>
<td>7</td>
</tr>
<tr>
<td>Salmonella infection rate – 2012</td>
<td>16.7</td>
<td>11</td>
</tr>
<tr>
<td>Hepatitis A, B, C – 2012</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>HIV – 2010</td>
<td>79.5</td>
<td>178.4</td>
</tr>
<tr>
<td>Viral meningitis – 2012</td>
<td>4.2</td>
<td>6.1</td>
</tr>
</tbody>
</table>

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#### Health Risk Factors

<table>
<thead>
<tr>
<th></th>
<th>Licking County</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binge drinking – Adults – 2006-2012</td>
<td>19.5%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Excessive drinking – Adults – 2006-2012</td>
<td>20.1%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Diabetes – Adults – 2006-2012</td>
<td>9.7%</td>
<td>8.9%</td>
</tr>
<tr>
<td>High cholesterol – 2012</td>
<td>43.9</td>
<td>46.3%</td>
</tr>
<tr>
<td>High blood pressure – 2006-2012</td>
<td>27.9%</td>
<td>28.8%</td>
</tr>
<tr>
<td>Obesity – Adults – 2006-2012</td>
<td>29.5%</td>
<td>29.6%</td>
</tr>
<tr>
<td>Cigarette smoking – Adults – 2006 - 2012</td>
<td>22.6%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Physically inactive adults – 2013</td>
<td>26.1%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Licking County Health Department Network of Care website – www.licking.oh.networkofcare.org*
Hospital Identifying Information

Name and primary address: Licking Memorial Hospital
1320 West Main Street
Newark, Ohio 43055
Licking County

Tax Identification Number: 31-4379519

Chief Executive Officer: Robert A. Montagnese, President & CEO

Person submitting report: Cynthia L. Webster, Vice President of Financial Services

CHNA report complete: November 15, 2016

CHNA report approved by the Board: December 14, 2016

CHNA report posted to website: December 16, 2016
Addendum

Status/Progress in Identified Health Needs

This report summarizes the results of Licking Memorial Hospital’s interventions in the health needs of the Licking County community, as identified in our 2013 Community Health Needs Assessment (CHNA).

The following Community Health Needs were initially identified in 2013 and have been carried over to our 2016 Assessment:
1. Reduce Tobacco Usage
2. Reduce Obesity
3. Decrease Breast Cancer Mortality
4. Decrease Colon Cancer Mortality

The following Community Health Need initially identified in 2013 has been “retired” and is considered complete:
1. Mobilize Partnerships and Develop Strategies to Address Community Health Objectives within the Community Health Improvement Committee

In addition to the objectives listed above that have been continued in our 2016 Assessment, several new Community Health Needs have been identified and added to the 2016 CHNA. The following is a summation of the results of our initiatives in response to the objectives identified in our 2013 CHNA.

Reduce Tobacco Usage:
Source data utilized for the 2013 and 2016 CHNAs includes data from the Licking County Health Department and the 2012 and 2015 Licking County Behavioral Risk Factor Surveillance Survey Reports. Much of the reported data has a lag in reporting; therefore, the most recently available data for our 2016 report reflects data from calendar year 2015. For this reason, it is impossible to determine the full, actual impact of our efforts between 2013 and 2016; however, results were as follows:
1. 2013 Licking County Adult Smoking Rate (using 2012 data) = 24%
2. 2016 Licking County Adult Smoking Rate (using 2015 data) = 24%

While the Licking County smoking rate remained unchanged, Licking Memorial Hospital is pleased to report the following results of our efforts to reduce smoking in our community, from 2014 through 2016:
1. Total number of new clients in tobacco cessation programming: 1,370
   a. This includes a 30% increase in new client volumes from 2014 to 2015 as our program was expanded.
2. Total number of tobacco cessation visits: 10,270
   a. This includes a 65% increase in visits from 2014 to 2015 as our program was expanded.
3. Total number of inpatient consults completed by tobacco cessation staff: 2,835
   a. This includes a 82% increase in inpatient consults from 2014 to 2015 as our program was expanded.
4. Total days wait time until next appointment available: decreased from a high of 48 days (2014) to an average of 4 days (2016)
5. Total number of pregnant women smokers enrolled in tobacco cessation program: 586
   a. This includes a 45% increase in pregnant women enrolled from 2015 to 2016 as our program was expanded.
6. Average overall “quit rate” for participants in tobacco cessation programming: 57%
7. Total cost to Licking Memorial Health Systems for nicotine replacement therapy (not including staff and other overhead costs): $173,605

While we do not have full three-year data to validate our program’s impact on the community smoking rate, it is likely that we may not see significant impacts once the final results are obtained, despite our best efforts. We have, however, determined this will remain an organizational priority, and we will continue to modify and expand our programs to meet the tobacco cessation needs of our community. Recent changes to our program in late 2016 include the addition of new telephonic counseling and in-home visits by tobacco cessation educators to reach those patients who may not be able to attend clinic settings.
Reduce Obesity:
Source data utilized for this indicator is even further delayed than smoking cessation data, with 2016 results reflecting 2013 community data. For this reason, it is impossible to determine the impact of our efforts, as the most recently available data on obesity in the community is still reflective of calendar year 2013, when our CHNA was initially formulated. However, community data is as follows:

1. 2013 Licking County Adult Obesity Rate (using 2010 data): 32%
2. 2016 Licking County Adult Obesity Rate (using 2013 data): 31.4%
3. Adult Obesity CDC Target 2020: 30.5%
4. 2013 Licking County Obesity Rate – Male (using 2010 data): 31.2%
5. 2016 Licking County Obesity Rate – Male (using 2013 data): 32.1%
6. 2013 Licking County Obesity Rate – Female (using 2010 data): 25.2%
7. 2016 Licking County Obesity Rate – Female (using 2013 data): 30.7%

As noted above, we do not anticipate having sufficient data to determine the impact of our efforts during 2014, 2015 and 2016 to address this priority until 2019 or 2020.

Since 2013, Licking Memorial Health Systems has maintained the following programs/activities to address obesity in Licking County:

1. Active•Fit program for youth in Licking County
2. Expanded the Dining with Diabetes program to two programs per year, each expanded from three to four sessions each. These programs are routinely fully booked, with approximately 100 participants each year.
3. Ongoing diabetes education programming through Community Case Management. This includes:
   a. Customer satisfaction ratings of at least 98% per year
   b. Reduction in wait times for dietitians from an average of 4 days to 3.4 days over this time period
   c. 1800+ diabetes education/training visits
4. Continued free diabetes screenings for community members at community events
5. Expanded offerings of “Healthier for Life” type educational programs, free for community members, taking place at the Hospital. The frequency of these programs has been doubled, and new offshoot programs offered, due to increased interest from the community.
6. The addition of a new “Active•Senior” program intended to offer healthy lifestyle goals and activities for seniors in the Licking County community. These include activities such as social and mental health events, and focuses on active lifestyles for a patient population that is underserved in our community in regards to fitness offerings. This program will be continued for the foreseeable future.

Licking Memorial Health Systems leadership understands that national trends for obesity are continuing to worsen, and that it will be very difficult to positively affect overall obesity rates for Licking County; however, we will continue to offer interventions to address this issue to improve the health of our community.

Decrease Breast Cancer Mortality:
Source data utilized for our 2016 Community Health Needs Assessment is, like the other indicators listed above, significantly behind. This is due to the fact that most cancer survival statistics are reported as “5-year survival rates.” Hence, the most recently available data, used for our 2016 CHNA, is reflective of cancer mortality data from 2008-2012. As a result, we are unable to assess the impact of our efforts on the overall breast cancer mortality rate during the years 2014-2016 at this time. However, we can report that we have seen the following results:

1. 2013 Licking County Breast Cancer Mortality Rate (using 2005-2009 data) = 34 deaths/100k population
2. 2016 Licking County Breast Cancer Mortality Rate (using 2008-2012 data) = 23 deaths/100k population
2016 results show that Licking County outperformed the Ohio average (23.6 deaths/100k population), and that the mortality rate has improved significantly due to improved/earlier diagnosis and expanded treatment options. Other highlights regarding the management of breast cancer over the past three years include:

1. Tracking and ongoing monitoring of the completion of breast cancer staging. Baseline results in late 2014 were reported as 93%, which improved to 100% in 2016.
2. Continued Oncology Program Certification from the Commission On Cancer, to include expansion of the program to meet new, stringent certification requirements in 2014 and 2015.
3. LMHS is a new participant in the National Consortium of Breast Centers (NCBC), a national quality indicator database for breast cancer treatment measures. LMHS is using performance data to benchmark against other treatment centers across the country to identify areas of good performance, as well as areas of opportunity.
4. The Comprehensive Cancer Care Committee has facilitated an improvement in “throughput” for breast cancer cases in an effort to reduce imaging turnaround time and time elapsed from biopsy to surgery. This has resulted in shorter wait times and faster surgical intervention for breast cancer patients.
5. LMHS continues to offer free mammography screenings on pre-scheduled dates during the calendar year to community members without insurance.
6. New mammography equipment was installed in 2016 that offers greater sensitivity to abnormal findings, thereby promoting earlier detection of breast cancers. We are optimistic that this technology will have a positive impact on breast cancer mortality for Licking County residents in the years to come.
7. Ongoing, free community education programs for breast cancer, to include free breast cancer screenings for attendees have been (and will continue to be) offered.

Decrease Colon Cancer Mortality:
Source data utilized for our 2016 Community Health Needs Assessment Colon Cancer initiative is the same as our Breast Cancer data, which is several years behind. Colon cancer rates also are reported as “5 year survival rates,” so the most currently available data is reflective of patient data from 2008-2012.

Due to the fact that the most recently available data is from the time period prior to our first CHNA, we cannot assess the impact of our efforts from 2014-2016 at this time on this metric; however, the reported results are as follows:

1. 2013 Licking County Colon Cancer Mortality Rate (using 2005-2009 data): 23.5 deaths/100k population
2. 2016 Licking County Colon Cancer Mortality Rate (using 2008-2012 data): 18.4 deaths/100k population

2016 results show that Licking County underperformed when compared to the Ohio average (17.0 deaths/100k population); however, the rate did decrease significantly when compared to the initial results reported in our 2013 CHNA. The additional indicator regarding colonoscopy evaluation is as follows:

1. 2013 Licking County Colonoscopy in Last Two Years (age 50+): 33%
2. 2016 Licking County Colonoscopy in Last Two Years (age 50+): 30.2%

From 2014 through 2016, an evaluation of our performance found that 64.7% of Licking Memorial Health Professionals (LMHP) patients, aged 50 or older, received a screening colonoscopy at intervals recommended by the American Cancer Society. By comparison, the Ohio average for patients meeting this same criteria is reported as 63.5%, meaning that LMHP providers are slightly outperforming Ohio averages in this measure.

Sadly, the indicator used for our 2013 CHNA for “Late stage colon cancer diagnosis” is no longer available and could not be used for our 2016 CHNA update. As a result, we are unable to provide any further information on the impact of our efforts on this indicator. Additional activities undertaken by LMHS to address this priority:

1. Continued Oncology Program Certification from the Commission on Cancer, to include expansion of the program to meet new, stringent certification requirements in 2014 and 2015.
2. A new gastroenterology provider was hired in 2015, increasing the number of providers available to perform colonoscopies from four to five. This has resulted in an increase of about 414 cases per month in 2014 to 466 cases per month in 2016, an 11% increase in procedural volumes. This also has resulted in a significant decrease in patient wait times for a screening colonoscopy (down from 14 days to 8 days).
Mobilize Partnerships and Develop Strategies to Address Community Health Objectives within the Community Health Improvement Committee:

This objective is considered complete at this time. Licking Memorial Health Systems is now an active participant in the Licking County Health Department’s Community Health Improvement Committee (CHIC). This committee, chaired by the Health Department, includes stakeholders from a variety of agencies throughout the county, including other healthcare providers and social welfare agencies. This committee has been formed to identify health priorities for the community, which are then targeted by the member agencies for improvement efforts. LMHS plays a key role in this committee due to our role as the primary health care system in the county. Committee meetings are held on a quarterly basis, at a minimum.

Beginning in 2018, Licking Memorial Health Systems will be partnering directly with the Licking County Health Department to generate new, overlapping Community Health Needs Assessments in which both agencies jointly identify and address health needs identified in the community. These assessments will be closely linked in content, and we anticipate increased collaboration in the future with the provision of community education, programming and resources to improve the health of the Licking County community.

Input from Persons Representing the Broad Interests of the Community

This addendum summarizes how the Hospital took into account input from persons representing the broad interests of the community. Licking Memorial Hospital utilized community input provided in developing the 2015 Licking County Behavioral Risk Factor Surveillance Survey Report. That report was prepared by the Center for Urban and Public Affairs at Wright State University for the Licking County Health Department to evaluate the health status of residents, establish public health priorities, and identify baseline measures for establishing public health program outcomes.

Community input for the 2016 Community Health Needs Assessment was accomplished through:

• Collaboration with representatives from the Licking County Health Department, representing all populations of Licking County, in identifying community health needs; and
• A telephone survey of 558 Licking County adult residents.

No written comments were received from the prior Community Health Needs Assessment to consider in conducting the 2016 Community Health Needs Assessment.

Methodology of Telephone Survey:

A random sample of land lines and cell phone numbers was selected. Telephone interviews were conducted from January through December 2015. A total of 558 Licking County adult residents were interviewed to obtain a 95% confidence level. The data were weighted to age, race, and gender to provide more accurate estimates and to adjust the distribution of the sample to reflect the actual demographics of the adult population. Through this sample and weighting process, the broad interests of the Licking County community were represented, including members of medically underserved populations, low-income and minority populations.

The telephone assessment is based on questions from the Behavioral Risk Factor Surveillance System Survey and community health assessments conducted by neighboring communities. The assessment addresses access to and utilization of health care, the prevalence of certain diseases, lifestyle choices; early detection and immunizations, attitudes and behaviors toward health and prevention, and some broader community concerns.