Community Health Needs Assessment

Mercy Medical Center

2015 – 2017 Tax Years Covered

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I. Community Served by the Hospital

Mercy Medical Center serves a primary service area (PSA) of Linn County and a secondary service area (SSA) of eight counties (Benton, Buchanan, Cedar, Delaware, Iowa, Johnson, Jones and Tama). The majority of Mercy’s patients for both inpatient and outpatient services live in Linn County. The community additionally includes those counties adjacent to Linn County and within a reasonable driving time to the hospital. The total population of Linn County in 2014 was 217,751. The total population of both primary and secondary service areas was 496,845. The projected 10 year population growth for the PSA is 2% and the SSA, 1%, annually.

Demographics for the combined service area are as follows:

- 49.7% male, 50.3% female
- 90.7% Caucasian
- 3.9% African American
- 0.5% Native American
- 4.2% Asian/Pacific
- 2.0% two or more races
- 3.5% Hispanic
- 14% of persons living in Mercy’s combined service area are age 65 or older
- 93.4% are high school graduates while 33.2% hold a bachelor’s degree or higher
- The median household income is $55,532
- The percentage of people living below poverty level is 11.9% as compared to 12.4% for all of Iowa
- 11% of Mercy’s patients use Medicaid and the number of uninsured individuals in Iowa is <10% according to the American Hospital Association
- The average persons per household are 2.434
- Federally-designated medically underserved areas are present in Benton, Buchanan, Delaware, Iowa, Jones, Linn and Tama counties

As of December 2015, the unemployment rate for Linn County is 3.6%. The eight contiguous unemployment rates range from 2.5-3.8%. Linn County features a diverse employer base including manufacturing, trade, education, service, finance and agriculture.

UnityPoint Health - St. Luke’s Hospital is located in Linn County and serves a similar geographic service area as Mercy Medical Center. Additionally, the University of Iowa and Mercy Iowa City are located in Johnson County, Regional Medical Center is located in Delaware County, UnityPoint Health - Jones Regional Medical Center is located in Jones County, and Virginia Gay Hospital is located in Benton County.
II. Community Health Needs Assessment Process & Community Input

In January 2015, the Together! Healthy Linn steering committee was formed to create a community health improvement plan that targets the priority health concerns for those who live, work, worship, or attend school in Linn County. This committee is composed of various organizations and groups who serve the Linn County area; several of the organizations serve the contiguous county area as well. A comprehensive community health assessment was conducted between March and August 2015. Linn County Public Health facilitated and led this process. In addition, the SSA public health departments were contacted by Mercy Medical Center to better understand their county needs through utilizing their community health assessment. For the full community health assessment reports prepared by Linn County Public Health please visit: [http://bit.ly/LCReportsandPublications](http://bit.ly/LCReportsandPublications).

The Together! Healthy Linn steering committee consisted of the following partners: Abbe Center for Community Mental Health, Area Substance Abuse Council, Blue Zones Project, Cedar Rapids Community School District, Cedar Valley Friends of the Family, Corridor Metropolitan Planning Organization, City of Cedar Rapids, City of Marion, Eastern Iowa Health Center, Four Oaks, Hawkeye Area Community Action Program, Heritage Area Agency on Aging, His Hands Free Medical Clinic, Horizons: A Family Service Alliance, The Gazette, Iowa Department of Public Health, Linn County Community Services, Linn County Board of Health, Linn County Board of Supervisors, Linn County Planning & Development, Linn County Public Health, Mercy Medical Center, Mount Mercy University, Planned Parenthood, Shuttleworth & Ingersoll, UnityPoint Health – St. Luke’s Hospital & Jones Regional Medical Center, United Way of East Central Iowa, and Waypoint. Additionally, Mercy Medical Center requested input from the public health departments of Benton, Buchanan, Cedar, Delaware, Iowa, Johnson, Jones, and Tama counties in regards to health priorities in their area.

Methodology

The community health assessment and community health improvement plan were guided by the strategic planning process Mobilizing for Action through Planning and Partnership (MAPP). The framework encompasses six phases, including:

1. Creation of the steering committee
2. Development of a community vision
3. Conducting a community health assessment
4. Identifying strategic issues
5. Development of the Community Health Improvement Plan
6. Implementation of the strategies and tactics to address the strategic issues identified

At the initial steering committee meeting in January 2015, the committee defined the community vision that would guide the development of the community health assessment and community health improvement plan. The committee envisioned a community where: “The local public health system is accessible, affordable, collaborative, holistic, inclusive, and works to achieve a culture of health through collective impact. The community is active, empowered, diverse, knowledgeable, and lives in an environment that is sustainable, and supports an optimal quality of life for all.”
Community Health Assessment
The community health assessment consisted of four unique assessments, each evaluating different aspects of the health condition of Linn County residents and existing assets available in Linn County. The four assessments include Community Themes and Strengths, Community Health Status, Forces of Change, and Local Public Health Systems. Each of the assessments had a specific target population or stakeholder group of focus and was guided by differing methodologies. All four assessments were guided by the work of an assessment-specific subcommittee.

Community Themes and Strengths Assessment (CTSA): The CTSA is a qualitative analysis of the perceptions, thoughts and opinions community members have regarding health. Of particular interest was identifying the needs of the community, perceived quality of life, and the assets available that may be used to improve community health. For this assessment, the target audience included community members who work, reside, worship, or go to school in Linn County. In order to obtain high-quality information from the community regarding their needs, barriers and health perceptions, the subcommittee utilized multiple assessment strategies. To begin, the subcommittee reviewed current data and identified gaps in data from specific populations. They also identified information needed. Gap analysis informed the need to target older adult, disabled, LGBT, rural, and minority populations and those with language barriers. Once identified, the group selected methods and strategies to reach the aforementioned populations. Methods selected included a sticker board, community survey and focus groups. Use of a wide array of assessment methods was thought to improve the likelihood of obtaining response from a larger number of individuals throughout the county. Data obtained through this comprehensive community assessment were synthesized into a single report and separated into logical categories to relay assessment findings.

CTSA Administration Methods:
- **Sticker Boards:** The sticker boards were a simple tool to obtain feedback from the community. A single question was posed for community members to reflect upon: “What do you think are the three most important factors for a healthy community?” Participants were asked to select three of 15 possible options on the board indicating their answers using three stickers provided to them by the facilitator. The order in which stickers were placed on the board was not significant or ranked for importance. Along with the sticker board, there was also an opportunity for participants to answer the question: “What are the most important health issues or concerns in Linn County?” These boards were hosted by subcommittee members at various community events and locations.

- **Community Survey:** For a more in-depth understanding of quality of life, health perception and perceived community assets, an electronic community survey was also disseminated across Linn County. Linn County’s Community Health Survey consisted of 16 primary questions relating to each of the three questions that drive the CTSA, with the final nine questions assessing the demographic characteristics of the respondent. Implementation of the survey occurred between April 2015 and June 2015 and utilized the Survey Monkey platform. Survey questions gained both quantitative and qualitative data related to the perceptions of the individual regarding personal and community
health. The survey link was disseminated through community partners, social media and print media. Once the survey was closed, the data was extracted from the Survey Monkey site into an Excel format by Linn County Public Health’s Epidemiologist. Overall, 404 respondents completed the Community Health Survey in the aforementioned timeline. Quantitative data was coded to allow for analysis. Definitions for the codes are provided in an associated codebook, which was created to provide community partners and others the ability to use and analyze the data as desired. Qualitative data was systematically organized into common themes and recoded to allow for analysis.

• **Focus Groups:** Throughout May and early June 2015, the CTSA subcommittee conducted five focus groups at four different sites in Linn County. Locations were selected based on the gaps in information for specific populations noted by the subcommittee as well as the subcommittee’s decision to oversample low-income and minority populations. Focus group sites included the Heart of Iowa, Oakhill Jackson Neighborhood Association, Catherine McAuley Center, and Geneva Tower. Each focus group was guided by a primary and secondary facilitator. Primary facilitators used a standardized script that was designed to explore the perceptions of the individuals being interviewed regarding the health of the community, community assets, barriers experienced, and how the community should be improved to support health. All data gathered from the assessment were systematically organized into common themes by question and recoded for analysis and presentation by a third party analyst not involved with the focus groups.

**Community Health Status Assessment (CHSA):** The CHSA was a quantitative assessment of how healthy Linn County is as a whole and identifies potential areas of concern. The CHSA was guided by analysis of 11 core indicators, with multiple data points falling under each:

- Demographic Characteristics
- Socioeconomic Characteristics
- Health Resource Availability
- Quality of Life
- Behavioral Risk Factors
- Environmental Health Indicators
- Social and Mental Health
- Maternal and Child Health
- Death, Illness, and Injury
- Communicable Disease
- Sentinel Events
Data to address each of the selected indicators were gathered from multiple sources between March and August of 2015. Sources included partners such as Mercy Medical Center, Linn County Public Health, Cedar Rapids School District, and the Linn County Continuum of Care Planning and Policy committee. In addition, data was obtained from the Behavioral Risk Factor Surveillance System (BRFSS), Iowa Department of Public Health, Iowa Youth Survey, Feeding America, U.S. Census Bureau, County Health Rankings, National Survey on Drug Use and Health, Iowa Public Health Tracking Portal, Uniform Crime Reporting Statistics, Iowa Department of Human Services, Centers for Disease Control and Prevention (CDC), and the Surveillance Epidemiology and End Results (SEER) Program. After data was gathered, it was synthesized into a comprehensive report and presented through tables and graphs that best allowed multiple audiences to understand the information.

Forces of Change (FoC): On April 21, 2015, Linn County conducted the Forces of Change Assessment. Members from multiple sectors within Linn County’s local public health system were invited or self-elected to participate in the assessment. The ideal participants for the Forces of Change Assessment were community leaders and officials with insight on factors, events, and trends that may potentially impact the health of the public or the operation of the local public health system. This assessment focused on issues that are broader-reaching, such as factors that impact the environment in which the local public health system operates, state and federal legislation, rapid technological advances, changes in the organization of healthcare services, funding shifts, etc. Using an affinity diagram, the members first identified 75 unique forces, trends or events that might impact the health of the community and consolidated them into 17 categories. Using the identified categories, the members brainstormed potential opportunities and threats posed by each category. Data obtained during this session and an informal follow-up assessment was documented and analyzed into a larger report.

Local Public Health System (LPHS): The intent of the LPHS was to assess how organizations within the system are doing in addressing the 10 essential public health services. Entities within the local public health system include all organizations who may impact the health of the community such as community centers, law enforcement, fire, elected officials, public health agency, transit, home health, laboratories, faith-based organizations, nonprofits, community health clinics, hospitals, doctors, employers, corrections, nursing homes, drug treatment, mental health, schools, neighborhood organizations, and EMS. This assessment was completed using the local instrument of the National Public Health Performance Standards (NPHPS; CDC, 2015). This instrument helps communities assess not only how they are doing in addressing the overarching essential public health services, but also the competencies and sub-competencies that fall under each service. As such, this is intended to be a very iterative and in-depth assessment requiring long-term planning. Due to the short turnaround time between planning and conducting the LPHA, the subcommittee decided to take a targeted approach in gaining feedback on each of the essential public health services by splitting partners within the local public health system into five workgroups, each focusing on two of the essential public health services. An initial survey covering the targeted public health services was sent to the members of the workgroups in June 2015. The workgroups were then convened in July to engage in facilitated discussions that covered the components falling under each of the targeted essential public health services. An initial survey covering the targeted public health services was sent to the members of the workgroups in June 2015. The workgroups were then convened in July to engage in facilitated discussions that covered the components falling under each of the targeted essential public health services. Following discussion, members rated how well the local public health system was doing in addressing the essential public health services. All components with a “Minimal Activity” or “Moderate Activity” rating were highlighted in a report as a needed area of improvement for the local public health system to address moving forward.
The Together! Healthy Linn Steering Committee recognizes that information gaps may exist in the committee’s ability to assess the community’s health needs related to a number of factors, including but not limited to population size, future needs of immigrant and/or refugee populations, and the unknown impact of Medicaid Modernization. As noted later in the significant community health needs section of this document, work needs to be done to improve the process of sharing community health data among community partners.

In addition, partner Mercy Medical Center did not receive any written comments on the hospital facility’s most recently conducted CHNA or implementation strategy. However, on the CHNA and implementation strategy webpage of the Mercy website, there is a “Contact Us” form that can be filled out by any individual. The submitted online form goes to Mercy’s Marketing department and that department forwards to Mercy’s Community Benefit office. Additionally, any mailed written comments would be forwarded on to the Community Benefit office.
III. Prioritized Significant Community Health Needs

Data obtained from the community health assessments were analyzed and synthesized into four community health assessment reports. Using the information from the assessments, the Together! Healthy Linn steering committee began to identify the pressing health issues that the community needs to target over the next three years in order to improve the overall health of Linn County residents. Prioritization occurred across two steering committee meetings held in October 2015. Common themes and data points from each of the four assessments were first identified, and then grouped into 10 logical overarching categories.

- Chronic Disease
- Collaboration
- Prevention through education
- Crime and Violence
- Quality of Life
- Access to Care
- Vulnerable Populations
- Substance Abuse
- Child/Adolescent Wellbeing
- Mental Health

After much discussion, the committee reduced the 10 strategic categories into five renamed categories: Behavioral Health, Social Determinants of Health, Quality of Life, Health Promotion, and Collaboration. These categories were then prioritized using a nominal group technique that required each member to select three categories using a rank of 1 (most important), 2, or 3. The rankings each held a reverse weight (ex: Rank of 1 = 3 pts). Once all members voted on the priority areas, the rankings were tallied and the three priorities were identified. Using the data points under each of the priority areas, three goals for each area were selected. In addition, subcommittees were formed to identify objectives and strategies for each of the goals that fell under the respective priority areas.

Findings and Results

The most consistent theme that appeared throughout the four assessments was a clear disparity in health and healthcare experienced by low-income individuals. This disparity was related to lack of access to transportation; health services; healthy foods; safe affordable housing; increased rates of mental health issues; barriers to engaging in physical activity; and a lack of neighborhood safety. Other common health issues that arose throughout the four assessments were an increased rate of obesity, diabetes, substance abuse, and engaging in unhealthy behaviors (poor diet, sedentary lifestyle and poor life-decisions). From the perspective of the local public health system, a significant area of needed improvement is in sharing community health data between partners and collaborating on common community initiatives rather than continuing to operate in individual silos. In improving these areas of collaboration, the local public health system may be strengthened to better meet the health needs of the community through collective impact.
Access to Health Services
There are many changes occurring within the healthcare system in Iowa that pose both opportunities and threats to the public’s health. With the passing of the Affordable Care Act (ACA), an increased number of individuals are covered by medical insurance providing increased opportunity to educate community members on improving their health and wellbeing. However, significant concern was expressed among health system partners in regard to the potential impact privatization of Medicaid will have on healthcare systems as well as the patients they serve. Other areas of concern are a lack of mental health and healthcare providers in Linn County and a subsequent inability of patients to obtain timely appointments for needed services. Cedar and Johnson Counties also listed access to health services as a priority.

Vulnerable Populations
The increasing number of working-poor, homeless, and students on free and reduced lunches poses a significant threat to the health and wellbeing of Linn County residents. Among the most significant threats is a lack of access to affordable and reliable transportation (limited bus schedule, ability to access bus stops, and cost), safe walking conditions (lack of sidewalks and increased violence), affordable healthy foods (food deserts, excessive cost of produce at stores), and an inadequate knowledge or understanding of how to make healthy decisions (food preparation, exercise, steps for disease prevention). Limited accessibility to affordable and reliable transportation threatens the ability of low-income populations to access needed food (food insecurity), attend medical appointments, and connect to employment. Likewise, a lack of affordable housing and the associated barriers related to obtaining adequate housing may result in an increase in the number of individuals in our community who experience housing insecurity and homelessness. Finally, with an increasing number of working-poor and food-insecure individuals, the demand for affordable food outweighs the supply available. Even when accessible, there continues to be a gap in knowledge, time and equipment necessary to prepare healthy foods. Buchanan and Johnson County identified social determinants of health for vulnerable populations as priority areas for their respective counties.
Mental Health and Substance Abuse
Mental health issues were described as a shortage of mental health providers, lack of available mental health services, stigma related to seeking help, and an inability to schedule a timely appointment with a provider. With an increase in the number of children and adults with diagnosed and undiagnosed mental health issues, resources available for these individuals are dwindling and are often inadequate to fit the needs of those seeking care. Of particular note is the shortage of psychiatrists and hospital beds to meet the demand of mental health patients in the area, particularly among rural, low-income, and adolescent residents as well as those within the jail system (juvenile and adult). Another concern noted is a lack of access to services due to an inability to afford services even when covered by health insurance. Even if individuals are able to afford services, long waiting lists to see a provider creates a significant barrier for those trying to seek help in addressing their mental illness. In the absence of needed mental health services, there is an increased risk individuals will choose to self-medicate through use of prescription pain medications, illicit drugs and alcohol.

With increasing numbers of additional illicit drug options available, there is a concern that there is a lack of community understanding regarding these substances and the impact the substance may have on Linn County. Compounding the issue of a poor understanding of illicit drugs is the poor regulation of these and other types of substances. This is particularly evident in the increased rates of deaths in Linn County resulting from accidental poisonings (12.1 deaths per 100,000 population). In addition to an increase in accidental poisonings, there was also an increase in the level of binge drinking among adults and illicit drug use among adolescents. Related to the social environment, community members were particularly vocal about the desire to move away from an apparent culture of alcoholism in the community to provide more family-friendly restaurants and recreation options. Likewise, community members highlighted a need for the community and families to model healthy behaviors for children to help support positive development. In addition, Buchanan, Cedar, Delaware, Johnson and Jones counties all identified behavioral health in their community health needs assessments as priorities.

Chronic Disease
The top two leading causes of death are similar to that of Iowa and the United States, with cancer being the number one cause of death and heart disease being the second. While cancer is the leading cause of death, the cancer rate is improving. However, the rate of deaths attributed to heart disease continues to increase. Likewise, the rate of diabetes has demonstrated a significant increased overtime. A common risk factor for these and all chronic diseases is excess weight. Like other parts of the country, there is an increased occurrence of overweight and obese adults and children in Linn County. Of particular concern are the parallel increase in overweight and obese adults and the significant increase in overweight kindergarteners. Increased rates of obesity were attributed to unhealthy behaviors such as poor diet, lack of physical activity and poor decision-making. Some barriers that were discussed related to this topic were inaccessibility of affordable healthy foods, lack of healthy food options in the community, lack of walkability and bikeability, poor sidewalk conditions, and neighborhood safety concerns. Overall, the high cost of healthy foods was the most consistent barrier noted associated with engaging in a healthy diet particularly among mid- to low-income residents. All of the contiguous counties to Linn identified promoting a healthy lifestyle and addressing conditions such as obesity, heart disease and diabetes as priorities.
Infectious Disease
A lack of infection prevention was noted among multiple audiences. However, parents and families were the most vocal about this issue. The biggest concern was in the continued cycle of illness and increased rates of pink eye and respiratory syncytial virus in daycares and schools. Another issue noted was in the inadequate cleaning techniques and education provided at these locations to prevent further infection. Other issues related to infectious disease are a significant increase in the rates of sexually transmitted infections (STIs), particularly chlamydia, syphilis and HIV. Primary barriers related to obtaining optimal sexual health is a lack of knowledge regarding STIs and safe relationships, as well as the stigma related to seeking treatment. While some schools within the county provide evidence-based comprehensive sexual health education, many do not. Delivery of evidence-based comprehensive sexual health education provides an opportunity to reduce teen pregnancy, STI, and intimate partner violence rates through increased understanding of safe and healthy relationships, potential repercussions and knowledge of how to protect one’s self. In addition, Buchanan and Delaware counties stated that improved immunization rates for children and adolescents was important to their counties prevention of infectious disease.

IV. Potentially Available Resources – Mercy Medical Center
Each community partner will identify the resources their organization is able to commit to address health priorities. Mercy Medical Center will identify in its implementation strategy the resources available to address the significant health needs. These resources include: staffing to provide education, screening, interventions, and outreach; materials, supplies and equipment to complete the identified strategies; and cash and in-kind contributions to nonprofit organizations working on identified priority needs which Mercy is not able to address. Mercy is an active member on the three priority area subcommittees. Mercy’s efforts will complement the work being done by other active partners in the community. Mercy will make referrals to 2-1-1 (a free health and human service information and referral source) and other services available in the community for those that we are unable to directly provide.

V. Evaluation of Impact
Between 2011 and 2015, significant improvement occurred in the community’s health related to the percentage of individuals who are uninsured, rate of cancer and heart disease mortality, incidence of gonorrhea, and prenatal care. As a result of the formation of multi-organizational collaborative Linn County Community Partnership, the uninsured rate improved from 7.4% in 2011 to 4.3% in 2014. Despite a significant decrease in cancer mortality over the past five years, cancer remains to be the leading cause of death in Linn County with a rate of 159.9 per 100,000 population. Likewise, heart disease continues to be the second leading cause of death; however, between 2011 and 2014 the mortality rate for heart disease decreased from 183.7 to 155.7 per 100,000 population. Finally, the trend in the rate of sexually transmitted infections (STIs) differed by infection type. The syphilis rate has been consistent overtime; however, there was a significant increase in rate that occurred between 2012 and 2013, from 3.3 to 10.6 per 100,000 population. This rate has continued to stay high with a rate of 10.1 per 100,000 in 2014. Chlamydia continues to demonstrate an upward trend with a rate of 486 per 100,000 population. Conversely, gonorrhea appears to be on a downward trend falling from 107 to 50 cases per 100,000 population between 2012 and 2014. Linn County is performing better
than both Iowa and the United States in providing prenatal care during the first trimester of pregnancy. Between 2007 and 2012, Linn County has increased the percentage of mothers who receive prenatal care during their first trimester from 66.9% in 2007 to 74.1% in 2012. Improvement in violence pertaining to abuse differed between child and adult cases. Between 2007 and 2013 the rate of child abuse decreased among all three types of abuse (neglect, physical and sexual). However, neglect continues to be the most significant issue regarding child abuse (1303.3 per 100,000 population). Between 2012 and 2014 there was a significant increase in dependent adult abuse across all types of abuse (physical, exploitation, sexual, denial and care by care taker, and denial of care by self). The largest increase in abuse type during this time occurred in denial of care by the caretaker increasing by a function of eight between 2012 and 2014. Similarly, the rate of substance abuse among adults and adolescents differ. Binge drinking has remained consistent among adults overtime but declined from 10% in 2010 to 5% in 2014 among adolescents. However, tobacco use declined among both adults and adolescents during the same period.

Finally, the rate of obesity and diabetes among adults are on an upward trend. Between 2011 and 2014, the percentage of adults who report being obese or overweight increased by nearly 11% from 57.7% in 2011 to 68.6% in 2014. An increase was noted in both the percentage of adults who are overweight and obese. According the Behavioral Risk Factor Surveillance System, the percentage of adults who have ever received a diabetes diagnosis increased from 7.8% in 2011 to 9.9% in 2014. Likewise, the mortality rate associated with diabetes mellitus has increased from 16.8 to 20.6 per 100,000 population between 2011 and 2014.

The CHNA was adopted by the Mission Committee of Mercy Medical Center’s Board of Trustees on 4/12/2016.