Mercy Health’s long-standing commitment to the community covers more than 150 years. This commitment has expanded and evolved through considerable thought and care in considering our communities' most pressing health needs. One avenue for examining these needs is through a periodic, comprehensive Community Health Needs Assessment (CHNA) for each Mercy Health hospital. The most recent assessments were completed by teams comprised of Mercy Health and community leaders. They include quantitative and qualitative data that guide both our community benefit and strategic planning.

The following document is a detailed CHNA for Marcum & Wallace Memorial Hospital (MWMH). Marcum & Wallace Memorial Hospital has extended the healing ministry of Jesus by improving the health of our communities for more than 50 years. Marcum & Wallace Memorial Hospital is a licensed Critical Access Hospital and Level 4 Trauma Center characterized by its family-centered care, community involvement and progressive ideas in healthcare. Providing primary care, outpatient services and a wide range of specialty clinic services, MWMH serves as a regional referral center the following Eastern Kentucky counties: Estill, Lee, Powell, & Owsley counties. Marcum & Wallace Memorial Hospital outpatient services include: Laboratory, Radiology, Rehabilitation, Sleep Medicine, Cardiac Services, and Nutritional Therapy.

Mercy Health has responded to community health needs as part of a five-year strategic plan that concludes in 2018. Mercy Health is investing more than $300 million in an electronic health system as we build integrated networks of care designed to improve the health of communities. We operate health and fitness centers, hospice facilities, outpatient clinics and senior living facilities.

Mercy Health contributes more than $1 million per day in community benefit services as we carry out our long-standing mission of extending care to the poor and under-served.

Marcum & Wallace Memorial Hospital strives to meet the health needs of its community. Please read the document’s introduction below to better understand the health needs that have been identified.

Written comments regarding the health needs that have been identified in the current CHNA should be directed to https://www.mercy.com/global/about-us/contact-us.

Through our CHNA, Mercy Health has identified the greatest needs among each of our hospital's communities. This enables Mercy Health to ensure our resources are directed appropriately toward outreach, prevention, education and wellness opportunities where the greatest impact can be realized.
**Table of contents**

**INTRODUCTION** .............................................................................................................................3
Community served by hospital ..............................................................................................................3
Information and data considered in identifying potential need ..........................................................4

**PROCESS AND METHODS** ...........................................................................................................4
Process for Gathering and Analyzing Data/Information .......................................................................4
1. External sources ................................................................................................................................5
2. Collaborating partners .....................................................................................................................5
Community Input ..................................................................................................................................5
1. Use of community input ...................................................................................................................5
2. Organizations providing input .........................................................................................................6

**EXECUTIVE SUMMARY** .............................................................................................................7
Significant health needs ........................................................................................................................7
1. Mental health ....................................................................................................................................7
2. Substance abuse .............................................................................................................................7
3. Obesity ............................................................................................................................................7
4. Prescription assistance ....................................................................................................................7
5. Diabetes ..........................................................................................................................................8
6. Increase specialty physician clinics ...............................................................................................8
7. After-hours/urgent care clinic .........................................................................................................8
8. Cancer ...........................................................................................................................................9
9. Heart disease ..................................................................................................................................9
Prioritized health needs .......................................................................................................................9
1. Substance abuse ............................................................................................................................9
2. After-hours care ............................................................................................................................10
3. Prescription assistance ..................................................................................................................10
4. Increase access to specialty services .............................................................................................10

**PROGRESS ON 2013 CHNA** .......................................................................................................11
Introduction

COMMUNITY SERVED BY HOSPITAL
T.R. §1.501(r)-3(b)(1)(i) and (3)

Marcum & Wallace Memorial Hospital (MWMH) is a 25-bed Critical Access Hospital (CAH) located in Irvine, Kentucky (Estill County) and serves as the center of care for three other rural Kentucky counties, including Lee, Owsley, and Powell. ZIP codes include 40336, 41311, 40380, and 41314. Like other rural communities, residents in the defined service area are more likely to suffer from chronic illness than their urban counterparts, and have limited access to healthcare services, lower incomes and insurance coverage, and fewer physicians per capita. Access to healthcare continues to be a major issue for people of this region, particularly for those without adequate health insurance. Although uninsured rates are improving with the expansion of Medicaid, the uninsured rate, Medicaid rate, poverty and unemployment are all considerably higher in this region compared to the rest of the nation.

The underinsured population in this region is higher than the state average. People are not receiving preventative healthcare and are either visiting the emergency room for routine illnesses or prolonging medical care until it becomes an emergency. Healthcare providers are often uncompensated for the care they receive, which weakens the financials of the regional hospitals and clinics. It is difficult to recruit healthcare professionals to an area with a large share of underinsured households.

As expected, areas with high underinsured rates will experience higher than average rates of chronic diseases, cancer deaths and diabetes. This is reflective in the overall health status of individuals living in the four-county service area compared to statistics for the Commonwealth of Kentucky and the United States. Behavioral conditions such as smoking, obesity, physical activity and oral health are high.

MWMH aims to serve our patients and each other in ways that reflect its core values of Compassion, Excellence, Human Dignity, Justice, Sacredness of Life and Service. Our Mission is to extend the healing ministry of Jesus by improving the health of our communities with emphasis on people who are poor and under-served.
INFORMATION AND DATA CONSIDERED IN IDENTIFYING POTENTIAL NEED

T.R. §1.501(r)-3(b)(1)(ii) and (5)

Information and data sources: federal, state or local health or other departments or agencies; community input

<table>
<thead>
<tr>
<th>Information and data sources</th>
<th>Date of data/information</th>
</tr>
</thead>
<tbody>
<tr>
<td>At-risk populations (T.R. §1.501(r)-3(b)(5)(i)(b))</td>
<td>Aug. 23, 2016</td>
</tr>
<tr>
<td>Additional sources of input (T.R. §1.501(r)-3(b)(5)(ii))</td>
<td>Aug. 17, 2016</td>
</tr>
</tbody>
</table>

2. Community secondary health data source was the Robert Wood Johnson Foundation (RWJF) County Health Rankings 2016.

3. Community input was obtained by CEDIK and the MWMH Community Steering Committee conducting focus groups, distributing surveys at the health department, public housing authority, primary care clinics, schools and a mobile link to the survey was shared online and through social media. Six focus groups were held and 215 surveys were completed from Jun.–Sept. 2016.

Process and methods

PROCESS FOR GATHERING AND ANALYZING DATA/INFORMATION

T.R. §1.501(r)-3(b)(6)(ii)

Process and methods to conduct the community health needs assessment:

The CHNA was conducted in collaboration with the Community Economic Development Initiative of Kentucky (CEDIK) at the University of Kentucky. CEDIK was primarily responsible for collecting all data for the CHNA. Three types of data were collected:

1. Hospital-specific data was obtained by direct request from the Kentucky Hospital Association. This included inpatient and outpatient origin reports from 2014 to justify the community served by the hospital. The diagnosis-related groups (DRGs) for inpatient and outpatient visits were collected to identify the procedures and underlying health issues of the patients that visited MWMH.

2. Community secondary health data source was the Robert Wood Johnson Foundation (RWJF) County Health Rankings 2016.

3. Community input was obtained by CEDIK and the MWMH Community Steering Committee conducting focus groups, distributing surveys at the health department, public housing authority, primary care clinics, schools and a mobile link to the survey was shared online and through social media. Six focus groups were held and 215 surveys were completed from Jun.–Sept. 2016.

The Community Steering Committee is a vital part to the CHNA process. These individuals represent organizations and agencies from the defined service area which enabled the hospital to get input from populations that were often not engaged in conversations about their health needs. Representatives included those serving the local health department, EMS, public housing, senior citizens and other healthcare providers and a representative of small businesses. During this process, the Community Steering Committee met as a group in the Mercy Room at MWMH in Jun. 2016 and Sept. 2016. CEDIK asked hospital representatives not to be present during any focus group discussions or debriefing the Community Steering Committee without the consent of those participating.
CEDIK created a template and provided training for Community Steering Committee members to facilitate community focus groups with identified populations as well as facilitated three focus groups in the summer of 2016. CEDIK also created and provided a mobile survey and paper survey for the hospital and the Community Steering Committee to gain community input related to current health needs.

The Community Steering Committee’s meeting in June was a focus group conversation. The information was used to identify the health needs of the community and help members better understand how to conduct a focus group on their own. Two members of the committee conducted their own focus groups. Two representatives of Interfaith Wellness, including a retired nurse that has served the community for many years and has the trust of the underserved population, facilitated a focus group during an August resident meeting at a public housing location. They used both the focus group questions and the survey to interview the participants. A community outreach employee for MWMH from Powell County held a focus group with the MWMH auxiliary to capture opinions from senior citizens. CEDIK facilitated a focus group at the Estill County Board of Education scheduled by a Community Steering Committee member. The attendees included teachers, board of education staff and Family Resource Youth Service Center directors who work with families and students in Estill County. This group focused on the health needs of children and families in the community as well as abilities or barriers to healthcare access.

A survey was developed with MWMH staff with the Community Steering Committee and was available in paper form and online. A mobile survey option was used to increase the number of surveys completed. Each member of the steering committee was responsible for distributing and collecting surveys as well as sharing the mobile link with coworkers and the populations that they served. The surveys were available at MWMH, public health departments, the Interfaith Wellness Ministry, Estill County Schools and Carhartt, Inc. 215 surveys were completed and returned.

A second Community Steering Committee meeting was held on Sept. 20, 2016 to review survey and health data to make recommendations to MWMH for CHNA health priorities to be addressed.

External sources
• 2016 County Health Rankings – Demographic data, social and economic data, health outcomes, health behaviors, and access to care data.
• Kentucky Department of Vital Statistics
• Kentucky Hospital Association – Hospital utilization data
• U.S. Census
• U.S. Center for Disease Control

Collaborating partners
• Community Economic Development Initiative of Kentucky (CEDIK) at the University of Kentucky

Community input
T.R. §1.501(r)-3(b)(6)(iii)

No written comments were received on the previously completed CHNA.

The CHNA relied heavily on input from local residents and health-related organizations. The primary sources of data included one-on-one interviews with numerous local stakeholders, a variety of local focus groups, and survey data gathered from individuals within the service area. Combined input was received from local public health departments, social agencies, healthcare providers and local employers within the geographic service region.

Through both the focus groups and the surveys, questions asked how the respondent felt the hospital could address the health needs of the community. There were four questions asked in the focus group:
1. What is your vision for a healthy community?
2. What is your perception of the hospital overall and of the specific programs and services?
3. What can the hospital do to meet the health needs of the community?
4. Can you provide the hospital with any ideas about specific solutions they could employ that would address the health needs of the community?
The focus group held with MWMH auxiliary members and senior citizens found that key areas of concern include smoking, diabetes, cancer and healthcare coverage. Obesity, physical activity, diabetes, and healthcare coverage and costs were identified as the key areas of concern at the Estill County Board of Education focus group that represented students and families in the community.

On Sept. 20, 2016, the Community Steering Committee met to review the results of the 215 surveys completed and input received from the community focus groups, compared the survey and focus group data to the various health data, and made recommendations to MWMH for CHNA health priorities to be addressed.

There were several steps in the priority of the health needs identified. The first step occurred with CEDIK reporting back to the Community Steering Committee with a review of survey and focus groups results to allow them to make recommendations to the Executive Team of the hospital. The Executive Team pared down the findings for analysis on Nov. 14, 2016.

### Organizations providing input

<table>
<thead>
<tr>
<th>Organization providing input</th>
<th>Nature and extent of input</th>
<th>Medically underserved, low-income or minority populations represented by organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estill County Health Department</td>
<td>Health Educator - distributed surveys, participated in a focus group and assisted with recommendations to the hospital team that identifies and prioritizes community health needs to be addressed</td>
<td>Public Health – medically underserved, low-income populations</td>
</tr>
<tr>
<td>Estill County Board of Education</td>
<td>Community Education Director - distributed surveys, participated in a focus group and assisted with recommendations to the hospital team that identifies and prioritizes community health needs to be addressed</td>
<td>Education - Students from medically underserved, low-income and minority populations</td>
</tr>
<tr>
<td>Estill County EMS</td>
<td>EMS Director - distributed surveys, participated in a focus group and assisted with recommendations to the hospital team that identifies and prioritizes community health needs to be addressed</td>
<td>EMS - Patients/clients from medically underserved, low-income and minority populations</td>
</tr>
<tr>
<td>Carhartt, Inc.</td>
<td>Human Resources Director - distributed surveys, participated in a focus group and assisted with recommendations to the hospital team that identifies and prioritizes community health needs to be addressed</td>
<td>Factory employees</td>
</tr>
<tr>
<td>Housing Authority of Irvine</td>
<td>Director - distributed surveys, participated in a focus group and assisted with recommendations to the hospital team that identifies and prioritizes community health needs to be addressed</td>
<td>Residents from medically underserved, low-income and minority populations</td>
</tr>
</tbody>
</table>
Executive summary

Significant health needs
T.R. §1.501(r)-3(b)(4)

MENTAL HEALTH
Mental health needs are served by providing coordinated care, education, support and programs that enable healthy behaviors.

Capacity and adequacy of service levels
• Limited mental health services available - accessibility limited in each county of service area.
• Transportation is also a barrier to care for patients.
• MWMH does not provide mental health services due to inability to recruit mental/behavioral health provider(s) to rural community.

Current service providers
Comprehensive Care provides limited mental health services within the service area.

SUBSTANCE ABUSE
Substance abuse needs are served through treatment and prevention programs.

Capacity and adequacy of service levels
• Bed availability and transportation is a barrier for patients seeking care for substance abuse treatment and conditions due to lack of localized services.
• MWMH does not provide substance abuse services or a treatment program due to lack of providers, space and beds to accommodate program.

Current service providers
West Care provides limited services within the service area. KY ASAP provides limited resources for community education, awareness and prevention.

OBESITY
Obesity is a growing chronic disease in need of new strategies for medical treatment and prevention. The high prevalence of obesity continues to strain the United States healthcare system.

Capacity and adequacy of service levels
• Limited services available within this service area to promote healthy exercise and healthy eating.
• No bariatric specialty services available within the service area.
• With limited resources, local organizations are working to promote awareness and education through community events, school system activities, exercise programs, and healthy eating education.
• Transportation is a barrier to care for some patients within the defined rural service area.

Current service providers
Various community organizations are currently working to create awareness and educate the community regarding obesity, including Interfaith Wellness Ministry, Estill County Health Department - Health Educator, and MWMH. MWMH provides nutritional consultations and education of patients referred to our facility on both an inpatient and outpatient basis. MWMH also provides community education regarding obesity at numerous community based activities, such as festivals, health fairs, workplace wellness events, and throughout the school system. MWMH also offers weekly yoga exercise classes to the community at no charge to promote exercise and healthy living.

PRESCRIPTION ASSISTANCE
Helping patients with prescriptions improves medication management issues, chronic disease outcomes, and lowers emergency department visits and hospitalizations.

Capacity and adequacy of service levels
• 340B Pharmacy Program available at MWMH and Mercy Health Physician clinics to assist indigent patients with medication expenses.
• No other defined program(s) within the community.
• Additional services are needed to accommodate the need for prescription assistance within the defined rural service area.
**Current service providers**
MWMH utilizes 340B Pharmacy Program to provide financial assistance to patients who cannot afford their medications. MWMH will continue to promote awareness of this service to the community and investigate opportunities to partner with other healthcare providers within the service area to address medication therapy management.

**DIABETES**
Diabetes needs are served when community members have access to diagnosis, treatment and coordination of care for their diabetes.

**Capacity and adequacy of service levels**
- Certified Diabetes Educator not currently available within the service area. Diabetic patients are referred to MWMH from various primary care settings for nutritional consultation with a dietitian.
- Diabetes awareness and education also promoted in conjunction with obesity education by MWMH at various community outreach events.
- Transportation is a barrier to care for some patients within the defined rural service area.
- Continued monitoring and education of disease and eating habits is not available within service area.

**Current service providers**
MWMH provides nutritional therapy consults to address the need for diabetic patient education. MWMH primary care clinics continue to try to recruit a Certified Diabetes Educator for their practices. MWMH also plans to provide future funding to support the certification of a diabetes educator at the hospital.

**INCREASE SPECIALTY PHYSICIAN CLINICS**
Specialty clinic services like orthopedics, oncology and pain management improve the quality of care in the region.

**Capacity and adequacy of service levels**
- 12 specialty services are currently available at MWMH, eliminating the need for patients to travel outside of service area for these specialized services.
- Additional specialty clinic services are needed within service area for orthopedics, oncology and pain management.
- Transportation is a barrier to care for some patients within the defined rural service area.

**Current service providers**
MWMH currently provides access to limited specialty services and will work to recruit other specialties to address the identified health needs of the community.

**AFTER HOURS/URGENT CARE CLINIC**
24-hour care needs are met with there is a focus on increased access to care.

**Capacity and adequacy of service levels**
- Urgent care clinics are not available within the service area.
- Limited availability to primary care services after normal business hours within the service area.
- Patients use the emergency room to treat non-emergent illnesses and conditions.
- One hospital within four county service area provides access to emergency care and after-hours healthcare needs.
- Transportation is a barrier to care for some patients within the defined rural service area.

**Current service providers**
MWMH provides extended office hours in all three primary care and rural health clinics located within the service area. MWMH Mercy Primary Care of Irvine opened a weekend clinic in Sept. 2016 that provides access to care for non-emergent illnesses or accidents. Future plans included the promotion of the weekend clinic and the evaluation of providing weekend care options in Lee and Powell counties.
Cancer needs are served when community members have access to services for early detection, treatment and prevention education.

Capacity and adequacy of service levels

- Oncology services and chemotherapy services not available within our service area.
- MWMH and other health organizations work to promote early detection and prevention of cancer through community outreach events and activities.
- Local access not available - cancer patients are referred to providers outside of the service area for treatment.
- Transportation is a barrier to care for some patients within the defined service area.

Current service providers

MWMH does not currently provide oncology and chemotherapy services due to the inability to recruit a provider to a rural community. Space limitations at MWMH have also created restricted barriers to providing chemotherapy services.

Heart disease and stroke needs are served by providing cardiac services, treatment and education.

Capacity and adequacy of service levels

- Local access to cardiology services is available at MWMH through specialty clinics.
- MWMH and other health organizations work to promote early detection and prevention of heart disease through community outreach events and activities.
- Transportation is a barrier to care for some patients within the defined service area.

Current service providers

MWMH has developed the Code AMI program with Baptist Health Lexington that helps stabilize and transfer acute myocardial infarction (AMI) patients for invasive treatment. MWMH plans continued development of this program to address heart disease. MWMH is also working to obtain Chest Pain Certification in 2017.

Prioritization of health needs

After reviewing community input, survey and focus group results from the CHNA process, the MWMH Executive Team ranked the identified needs in order of priority to be addressed by the hospital. To facilitate prioritization of identified health needs, a ranking process was used. Health needs were ranked based on five factors:

1. The ability of MWMH to evaluate and measure outcomes.
2. The number of people affected by the issue or size of the issue.
3. The consequences of not addressing this problem.
5. The existence of hospital programs which respond to the identified need.

Health needs were then prioritized by their overall ranking, the degree to which MWMH can influence long-term change, and the impact of the identified health needs on overall health.

Prioritized health needs

Based on all of the above information and processes, the prioritized health needs of the community served by the hospital are listed below.

Substance Abuse

There are currently limited resources for community education, awareness and prevention within the MWMH service area. The hospital has identified a need to increase substance abuse education and awareness within the community. The hospital intends to partner with Estill County EMS and other community-based organizations to provide substance abuse prevention education to students, assist the community by providing identified patients with the appropriate prevention and treatment referral resources, and collaborate with the KY ASAP of Estill and Powell Counties to promote community awareness and education regarding substance abuse prevention and detection.
AFTER-HOURS CARE
There are no local resources that provide after-hours or weekend care for patients with non-emergency illnesses and injuries in Estill County. Patients use the emergency room to treat non-emergency illnesses and conditions, and there is only one hospital within a four-county service area to provide access to emergency care or after-hours needs. Transportation is a barrier to care for some patients within the defined rural service area. The hospital’s goal is to lower non-emergency use of the emergency room.

PRESCRIPTION ASSISTANCE
Additional services are needed to accommodate the need for prescription assistance within the defined rural service area. The hospital has identified a need to improve medication management issues, chronic disease outcomes, and lower emergency department visits and hospitalizations. A need also exists to develop a medication therapy management (MTM) program using a community registered pharmacist to provide an integrated model of healthcare delivery that will improve the health of residents living in rural communities. The MTM program will address prescription cost assistance, medication reconciliation, medication adherence, and patient understanding and disease control for the at-risk and medically under-served population.

INCREASE ACCESS TO SPECIALTY SERVICES
Specialty clinic services are needed within the service area for orthopedics, oncology and pain management. Transportation is a barrier to care for some patients within the defined rural service area. A need exists to recruit these additional specialty providers to the service area to improve the overall health status of the community.

Resources available
Existing healthcare facilities and other resources in the community include:

SUBSTANCE ABUSE
Resources include West Care and KY ASAP. The hospital has identified the local schools and Estill County EMS as additional resources to prevent and recognize substance abuse awareness.

AFTER-HOURS CARE
Resources include MWMH Mercy Primary Care of Irvine, which provides extended office hours in all three primary care and rural health clinics located within the service area. MWMH Mercy Primary Care of Irvine will open a weekend clinic in September 2016 that will provide access to care for non-emergency illnesses or accidents.

PRESCRIPTION ASSISTANCE
Resources include MWMH’s 340B Pharmacy Program to provide financial assistance to patients who cannot afford their medications. MWMH has also identified Project HOME Network to partner with to increase awareness and provide a MTM program.

INCREASE ACCESS TO SPECIALTY SERVICES
Resources include MWMH, which provides access to limited specialty services and will work to recruit additional specialties to address the identified health needs of the community.
# Progress on Health Priorities Identified in the 2013 Health Needs Assessment

## CANCER

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung Cancer Screening Program</td>
<td>MWMH implemented a Lung Cancer Screening Program and successfully obtained lung cancer screening accreditation in July 2016.</td>
</tr>
<tr>
<td>Community outreach, support and education</td>
<td>MWMH increased the number of colonoscopy screenings conducted by 34% since 2013 by offering free colonoscopy prep kits to patients of MWMH primary care clinics and the implementation of a new one-day colonoscopy process to lower total follow up time. The hospital also conducted annual breast cancer awareness campaigns during May and October to promote mammography screenings resulting in 1,418 mammograms completed. MWMH Foundation has initiated a campaign to purchase a 3D mammography machine in 2016.</td>
</tr>
</tbody>
</table>

## HEART DISEASE

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain accreditation through the Society of Cardiovascular Patient Care</td>
<td>MWMH completed the first application phase for chest pain accreditation with the Society of Cardiovascular Patient Care. Phase two of the application process is scheduled for February 2017.</td>
</tr>
<tr>
<td>Increase access to cardiology specialty clinics</td>
<td>The hospital improved access to specialized cardiology services within the service area by increasing the number of cardiology specialty clinics at MWMH.</td>
</tr>
<tr>
<td>Community outreach, support and education</td>
<td>MWMH conducted more than 1,500 cardiovascular disease screenings at community outreach events. A total of 380 patients had an abnormal screening and were recommended for further evaluation with their primary care provider.</td>
</tr>
</tbody>
</table>

## USE OF EMERGENCY ROOM

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Navigation Program</td>
<td>MWMH and Project Home Network implemented an ED Navigation Program that works to identify patients who consistently use the emergency room for non-emergency issues and helps them establish a primary care provider. The ED Navigator Program has assisted 187 patients with establishing a primary care provider.</td>
</tr>
<tr>
<td>Increase access to after-hours care</td>
<td>MWMH continued to work on opening a weekend clinic and extended evening hours at primary care clinics to provide an alternative to the emergency room for non-emergency illnesses or injuries.</td>
</tr>
</tbody>
</table>